THE

MANITOBA HYDRO-ELECTRIC BOARD
41ST ANNUAL REPORT

FOR THE YEAR ENDED MARCH 31, 1992

A MOMENT IN MANITOBA HYDRO HISTORY

100 years ago: The Winnipeg Electric Street Railway Co. was incorporated in 1892 by an Act of the Legislature of Manitoba. As well as running streetcars, the utility sold electric heat, light or power. The company was an early predecessor to Manitoba Hydro.

50 years ago: In 1942 the Manitoba Power Commission began its program to connect thousands of farms in Manitoba to the electrical system. By the time it was completed 11 years later, Manitoba had the distinction of being western Canada's most completely electrified province.

Printed in Canada using vegetable-based inks.

92-07387/

COVER: POWER SMART KIDS

Manitoba Hydro's Lynda McCullough shares some Power Smart ideas with the Grade 6 class from Mapleton School in Selkirk. The children are being introduced to the benefits of energy conservation and have already learned that saving energy saves the environment. Manitoba Hydro moved towards a new era of energy conservation with the adoption of 17 Power Smart programs aimed at customers in the industrial, commercial, agricultural, municipal, and residential sectors. The utility's goal is to reduce the growth in electricity demand by 285 megawatts by 2001.

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ISSN 0460-9581

PHOTO:
Knee Lake, near Oxford House, northeastern Manitoba.

COVER: POWER SMART KIDS

Manitoba Hydro's Lynda McCullough shares some Power Smart ideas with the Grade 6 class from Mapleton School in Selkirk. The children are being introduced to the benefits of energy conservation and have already learned that saving energy saves the environment. Manitoba Hydro moved toward a new era of energy conservation with the adoption of 17 Power Smart programs aimed at customers in the industrial, commercial, agricultural, municipal and residential sectors. The utility's goal is to reduce the growth in electricity demand by 285 megawatts by 2001.

100 years ago: The Selkirk Steam Railway Co. was incorporated by an act of the Legislature of Manitoba. For a number of years, the utility sold electric [illegible]. The company was an early predecessor of Manitoba Hydro.

50 years ago: In 1942 the Manitoba Power Commission began its program to connect thousands of farms in Manitoba to the electrical system. By the time it was completed 11 years later, Manitoba had the distinction of being among Canada's most completely electrified [illegible]

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PHOTO:
Rose Lake, near Oxford House.
Printed in Canada [illegible]

HIGHLIGHTS

FINANCIAL

Gross Revenues
$756.7 million

Total Expenses
$739.0 million

Net Income
$17.7 million

Extraprovincial Revenues
$97.0 million

Energy Sales within Manitoba
$653.1 million

Finance Expense
$339.4 million

Reserves
$182.8 million

Additions to Fixed Assets
$705.8 million

OPERATING

(INTEGRATED SYSTEM)

Total Generation
(including isolated stations)
24.0 billion kilowatt-hours

Manitoba Firm Energy Supplied
17.7 billion kilowatt-hours

Manitoba Peak Load
3 480 000 kilowatts

(MANITOBA HYDRO)

Total Hydraulic Generation
22.6 billion kilowatt-hours

Power Sales to Manitoba Customers
14.5 billion kilowatt-hours

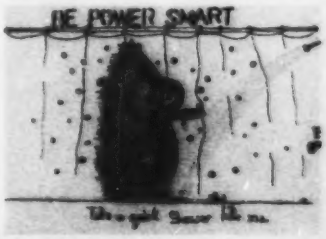
Extraprovincial Sales
5.7 billion kilowatt-hours

Number of Customers
377 383

Peak Number of Employees
4 522

OTHER

- Limestone Generating Station officially opened "ahead of schedule and under budget".
- major settlement agreements reached with native bands and northern communities.
- environmental panel appointed for reveiw of proposed Conawapa Project.
- employee safety ranked number one in Canada for fewest days lost due to injuries (major electrical utilities).
- energy conservation targets substantially increased.
- customer service programs enhanced.



Jory Fredrickson
Nordale School
1st Prize
Grade 4 (City)

Chantal Braun
Woodlawn School
1st Prize
Grade 4 (Rural)

A poster contest to mark October as Power Smart month was held involving all Grade 4, 5 and 6 classrooms in Manitoba with over 30 000 students competing. Some of the winning entries are featured in this report.

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Eugene Baittiaux
Sargent Park School
1st Prize
Grade 5 (City)

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Tiffany Barkman
Woodlawn School
1st Prize
Grade 5 (Rural)

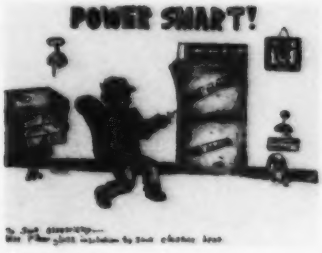
CORPORATE PROFILE

Manitoba Hydro is a Crown Corporation owned by the provincial government. It produces electricity by operating 12 hydraulic generating stations, two thermal generating stations and 13 diesel sites. Power is distributed to 377 383 customers throughout Manitoba, except for the central portion of the City of Winnipeg.

The Manitoba Hydro-Electric Board is appointed by the Provincial Cabinet to direct the business of the Corporation. Through its Chairman, the Board reports on the activities of Manitoba Hydro to the Minister responsible for the administration of The Manitoba Hydro Act who, in turn, reports to the Legislative Assembly. In this manner, Manitoba Hydro is responsible to the people of Manitoba through their elected representatives.

Just over 4 400 employees are involved with Manitoba Hydro's generating, transmission and distribution system. The Corporation's total assets are nearing $6 billion, making it the fourth largest electrical utility in Canada.

The Corporation's head office is in Winnipeg. In addition, four regional offices and 71 district offices serve the needs of its customers.



Nick Paradis
West Grove School
1st Prize
Grade 6 (City)

Shawn Fedora
Mapleton School
1st Prize
Grade 6 (Rural)

LETTER OF TRANSMITTAL

July 31, 1992

The Honorable Jim Downey
Minister responsible
for the administration of
The Manitoba Hydro Act
Legislative Building
Winnipeg, Manitoba
R3C 0V8

Dear Minister:

I have the honor of presenting the 41st Annual Report of The Manitoba Hydro-Electric Board together with financial statements for the fiscal year ended March 31, 1992.

Respectfully submitted,

John S. McCallum
Chairman
The Manitoba Hydro-Electric Board

CHAIRMAN'S MESSAGE

The mandate of The Manitoba Hydro-Electric Board is "to provide for the continuance of a supply of power adequate for the needs of the province, and to promote economy and efficiency in the generation, distribution, supply and use of power". The Board interprets this mandate within the context of contemporary values and conditions.

I am pleased with the progress made during the year on a number of important issues. Economic slowdown always complicates the business task, but Manitoba Hydro staff rose admirably to the occasion. It is a particular tribute to Manitoba Hydro staff that the 1 330 megawatt Limestone Generating Station was opened ahead of schedule and under budget. Premier Gary Filmon officially opened Limestone in September 1991.

Progress continued during the year on plans for a public environmental review of the Corporation's development plans for major generation and transmission facilities. The hearing process will fully inform the public and interested groups on the major components of Manitoba Hydro's development plans including Conawapa Generating Station, Bipole 3 transmission line, and the 1 000 megawatt power sale to Ontario Hydro. The hearing process will also inform the Corporation on the concerns and priorities of the public.

Since Manitoba Hydro's Capital Development Plan received the endorsement of The Public Utilities Board in November 1990, there have been some decreases to projections of electricity load growth in Manitoba, as well as some increases to the Corporation's target for energy conservation. These changes, however, are within the range of sensitivities reviewed by The Public Utilities Board and do not detract in any substantive way from the significant benefits of the power sale to Ontario. The Ontario Hydro sale is a good business deal for Manitoba which will result in many person years of employment, will help to stimulate a slow economy, and most importantly, will result in relatively lower electricity rates in our province for well into the next century.

The commitment of the Board to energy conservation was reinforced in 1991-92 with the adoption of a 285 megawatt target reduction in the growth of electricity use by 2001. This revised target is based on detailed information gathered about the costs and potential savings available under the particular circumstances prevailing in Manitoba. The new Power Smart programs introduced during the year are beginning to yield some reductions in the growth of electricity consumption and appear to enjoy the support of a broad range of Manitoba Hydro customers.

Customer satisfaction is a high priority of the Board and during the year the Corporation took steps to ensure a continued high level of customer satisfaction. Indications are that the substantial majority of Manitoba Hydro customers believe they receive a good to excellent level of service from the Corporation. The Corporation will be conducting regular customer surveys to confirm that we are meeting customers' expectations in all facets of our business.

Of special significance are the settlement agreements reached with a number of native bands and northern communities with whom the Corporation had outstanding obligations. In the past year, agreements have been reached with The Pas Indian Band, Grand Rapids First Nation and the Community of Cormorant in settlement of outstanding obligations related to the construction of the Grand Rapids Generating Station. In addition, a settlement agreement has been reached with the Split Lake Cree First Nation related to the impacts of the Lake Winnipeg Regulation and Churchill River Diversion projects.

The Board notes that even in the face of moderate but regular rate increases in the past several years, Manitobans continue to enjoy electricity rates that are among the lowest in North America. Manitoba Hydro has retained its position relative to utilities in other jurisdictions and the long-term outlook for the operations of the Corporation suggest that Manitobans will continue to benefit from stable and relatively low electricity rates.

I would like to thank all of those who assisted the Board in its work during the year.

J.S. McCallum
Chairman

THE MANITOBA HYDRO-ELECTRIC BOARD

Standing, from left to right: John Puchniak, Terry R. Stratton, Harold J. Perkins, William E. Cheater.
Seated, from left to right: Kenneth S. Patino, Edmund Kuffel, Charles E. Curtis, John S. McCallum, *Chairman*, Clyde R. McBain, Rod J. Beaudry.

John S. McCallum, *Chairman*
Faculty of Management, University of Manitoba

Darlene R. Hildebrand*, *Vice-Chair*
Account Manager, Royal Trust

Rod J. Beaudry
Production Division, Manitoba Hydro

William E. Cheater
Regional Services Department, Manitoba Hydro

Charles E. Curtis
Deputy Minister of Finance, Province of Manitoba

Edmund Kuffel
Faculty of Engineering, University of Manitoba

Clyde R. McBain
President, Ancast Industries Limited

Kenneth S. Patino
Design Engineer, Winnipeg Hydro

Harold J. Perkins
Office of Extension, Brandon University

John Puchniak **
President, Thadeus Ltd.

Terry R. Stratton
Managing Partner, The IKOY Partnership

Rosemary L. Vodrey*
Member of Legislative Assembly
for Fort Garry, Province of Manitoba

** Resigned during the fiscal year / ** Appointed in 1992*

PRESIDENT'S MESSAGE

The 1991-92 fiscal year was successful for Manitoba Hydro on many fronts. Most notably, the Limestone Generating Station was officially opened, the Corporation reinforced its commitment to customer service, energy conservation targets were greatly increased, significant mitigation settlements were concluded, union agreements were successfully negotiated, and financial results exceeded expectations.

In September 1991, Premier Gary Filmon officially opened the Limestone Generating Station, the culmination of many years of planning and construction activity. When completed this fall, the 1 330 megawatt station will be the largest in the province. Limestone is an outstanding success story in many respects: in terms of its capital construction – coming in significantly under budget and ahead of schedule; its safety record – the best on any Manitoba Hydro construction project to date; in terms of the jobs created for northerners and northern aboriginals – greater in number than previous projects; and in terms of environmental protection – Manitoba Hydro's most environmentally sensitive construction project.

During the year, Manitoba Hydro created a Northern Region, headquartered in Thompson, to bring the responsibility for customer service in the north closer to the people being served. Throughout the province our staff have a well-deserved reputation for operating a reliable network and for restoring service quickly in case of an outage. We continue to strive to maintain and improve on this reputation for excellent service.

Manitoba Hydro also had to overcome adversity during the year, with major storms in July and October that caused considerable damage to the electrical transmission and distribution systems. And in March, an unprecedented failure of the headcover bolts in Unit 1 at the Grand Rapids Generating Station caused the complete shutdown of the station for almost two months. A comprehensive assessment of this failure is underway and precautions have been taken with respect to similar components in other stations. It is especially noteworthy that despite the adverse conditions, the safety record of Manitoba Hydro employees continued to improve. 1991-92 marks the 28th consecutive year that Manitoba Hydro's safety record has ranked in the top four of Canadian utilities.

The 1991-92 fiscal year will be noted as a milestone for Manitoba Hydro with the official launch of the Power Smart program. The program marks a significant stepping up of the Corporate commitment to energy conservation. While Manitoba Hydro has for many years encouraged energy conservation by providing information and advice to its customers, Power Smart takes energy conservation to new heights. Included will be cash incentives to customers to purchase products that save electricity, aggressive customer information programs and the development and marketing of new cost-effective conservation technologies.

The target reduction in future load growth through Power Smart was revised during the year from 100 megawatts to 285 megawatts, based on a comprehensive study of the potential energy savings available with local circumstances in Manitoba. The new target is a "made-in-Manitoba" goal, custom-designed to recognize the unique aspects of electricity use in the Manitoba environment. Manitoba Hydro is optimistic that our customers will respond favorably to Power Smart and that the 285 megawatt target can be met or exceeded by 2001.

Manitoba Hydro concluded settlements during the year with The Pas Indian Band, the Community of Cormorant and the Grand Rapids First Nation as compensation for impacts arising out of the construction and operation of the Grand Rapids Generating Station, built during the 1960s. A major settlement agreement was also reached with the Split Lake Cree First Nation, one of the five Bands who were party to the Northern Flood Agreement signed in 1977 to compensate communities adversely affected by the Lake Winnipeg Regulation and Churchill River Diversion projects. These settlements are indicative of a renewed commitment by the Corporation to deal fairly with the people who have been affected by Hydro development projects. The Corporation has been increasing its efforts to ensure progress in this area.

I am especially pleased that management and the respective union bargaining representatives were able to successfully negotiate renewed agreements for all unionized employees in the Corporation. The terms of the renewed agreements extend from two to three years and

demonstrate the amicable and cooperative relationship that exists between management and staff within the Corporation.

Net income amounted to $17.7 million in 1991-92. Although lower than the previous year by $30.9 million, financial results were especially good considering that the first eight units of Limestone are now in service and the associated carrying costs are being added to the rate base. In fact, net income exceeded expectations by close to $15 million in 1991-92. This was primarily due to the successful negotiation of an agreement to buy-out a lease obligation from the Government of Canada pertaining to high voltage direct current transmission facilities constructed in the late 1960s between Manitoba Hydro's northern generating stations and the City of Winnipeg. In addition to the favorable impact on operating results in 1991-92, the lease buy-out will result in lower charges to operations in future years than otherwise would have occurred with a continuation of the lease agreement.

In June 1991, a federal/provincial Environmental Assessment Review Panel was appointed to conduct the public review of the Conawapa Generating Station and its associated transmission facilities. The Corporation looks forward to a complete and open examination of the environmental impacts of its development plans and is preparing for what will be the most thorough environmental impact assessment ever undertaken in Manitoba.

I want to thank the employees of Manitoba Hydro for the dedication to service they have demonstrated during the year. In particular, those employees who are often called upon to work under hazardous and inclement conditions are to be commended for their efforts. I would also like to thank the Chairman and Members of The Manitoba Hydro-Electric Board for their support and guidance.

R.B. Brennan, C.A.
President and Chief Executive Officer

THE EXECUTIVE

Back row, left to right: Dennis L. Riehl, Ian W. Dickson, R. Murray Fraser, J. Barry Gessner, Will J. Tishinski
K. Doug Munro, Don A. Kilgour, F. Al Macatavish.
Seated, centre: Ralph O. Lambert, Robert B. Brennan, *President and Chief Executive Officer*.

Robert B. Brennan
President and Chief Executive Officer

Ralph O. Lambert
Executive Vice-President

Ian W. Dickson
Vice-President Environmental Affairs

R. Murray Fraser
Senior Vice-President

J. Barry Gessner
Vice-President Finance and Chief Financial Officer

Don A. Kilgour
Vice-President Engineering and Construction

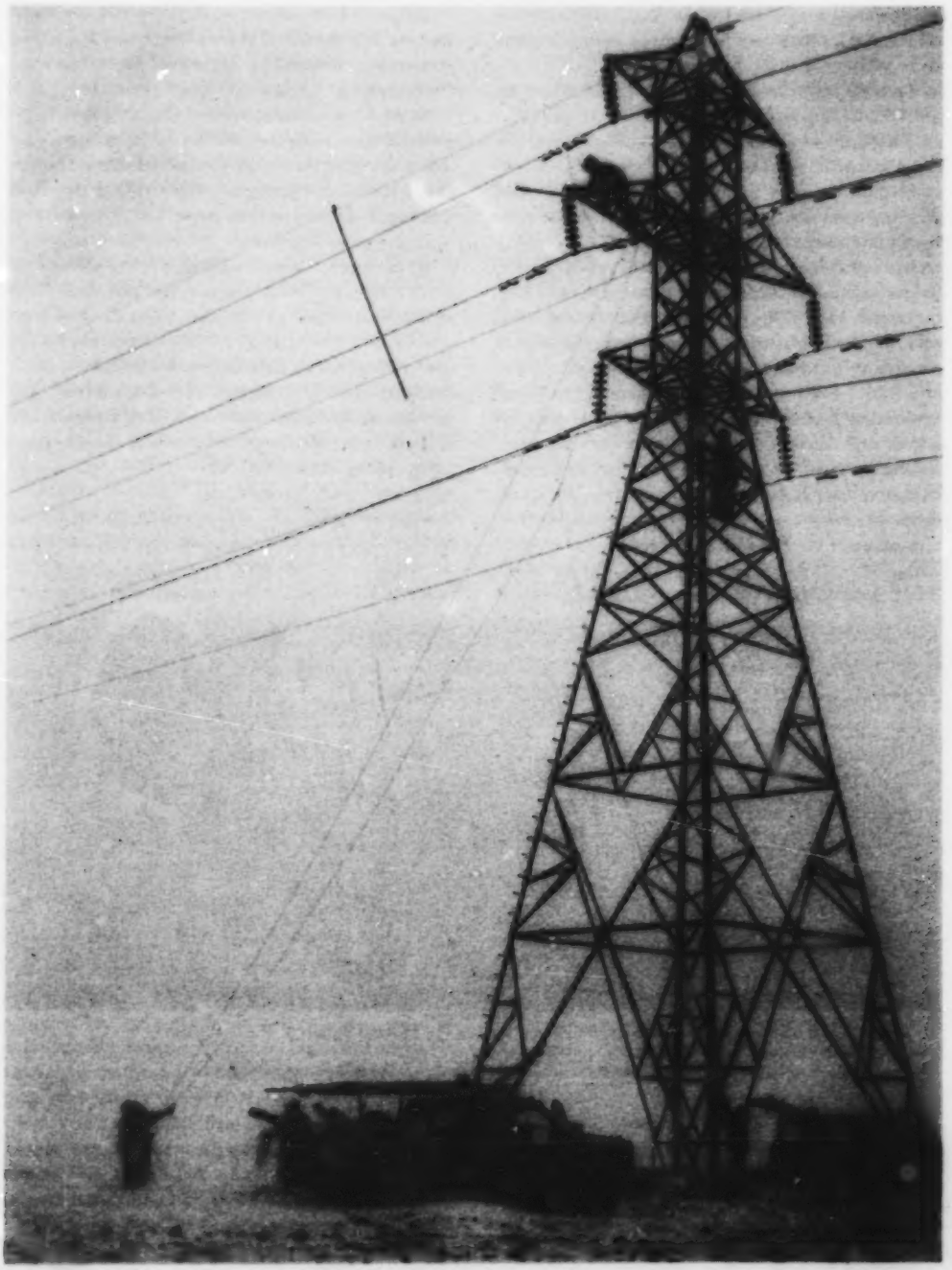
F. Al Macatavish
Vice-President Customer Service

K. Doug Munro
General Counsel and Corporate Secretary

Dennis L. Riehl
Vice-President Personnel and Services

Will J. Tishinski
Vice-President Power System Planning

CUSTOMER SERVICE



HYDRO BATTLES ICE STORM: Freezing rains and high winds combined to spell trouble for up to 20 000 Manitoba Hydro customers in October. While the ice storm raged across southcentral portions of the province over a two-and-a-half day period, Manitoba Hydro crews struggled to make repairs and restore power under miserable conditions.

ENERGY CONSERVATION

One of the newest Corporate initiatives resulted in the increased distribution of information on energy use and conservation under the Power Smart label. Power Smart, Manitoba Hydro's new energy conservation theme launched in April 1991, began to offer programs in all customer sectors – residential, commercial, industrial, agricultural, and municipal.

Eight Power Smart programs have already achieved energy savings and reductions in electrical demand. These are: Street Lighting program, Sentinel Lighting program, Residential Showerhead pilot program, Commercial Showerhead pilot program, Infra-red Heat Lamp program, High-Efficiency Motors program, Outdoor Timer program, and Refrigerator/Freezer Buy-Back pilot program.

The five-year Street Lighting and three-year Sentinel Lighting conversion programs have attained the first year's objectives only nine months through the programs. The lighting conversions have resulted in a demand reduction of 1 800 kilowatts, with energy savings totalling 5 500 000 kilowatt-hours as of fiscal year-end. A total of 7 572 street lighting units had been converted to more energy-efficient high-pressure sodium (HPS) lighting and 5 677 sentinel units were converted to HPS on commercial premises and farms.

Pilot programs for the installation of energy-efficient showerheads in both residential and commercial premises were completed with a total of 739 showerheads installed in homes and another 1 959 in commercial buildings. With these programs, it is estimated that electrical demand was reduced by 170 kilowatts and 1 200 000 kilowatt-hours of energy were saved.

Under the Infra-red Heat Lamp program, rebates were initially issued for a total of 21 193 energy-efficient parabolic aluminum reflector heat lamps purchased for use in agricultural buildings. Using 30 per cent less energy than conventional lamps to deliver an equivalent amount of heat, these lamps represent a reduction in demand of 1 600 kilowatts and a reduction in energy consumption of 8 000 000 kilowatt-hours.

Eight Power Smart programs have already achieved reductions in electrical demand and energy savings

Since program commencement in September 1991, the High-Efficiency Motors program has encouraged, through incentives, the purchase of 122 high-efficiency motors with a total of 1 676 horsepower. The resulting demand and energy savings amounts to 54 kilowatts and 300 000 kilowatt-hours respectively.

The Outdoor Timer program proved to be a successful Power Smart venture with more than 8 200 $5 rebates processed to the end of March 1992. The approximate energy and demand savings for this number of timers are 1 100 kilowatts and 3 580 000 kilowatt-hours.

The Refrigerator/Freezer Buy-Back pilot program was a joint venture with the City of Winnipeg and Manitoba Environment to determine the viability of implementing a full-scale program for the safe recovery and recycling of CFCs (chlorofluorocarbons) and to determine the effectiveness of reducing electricity use. Customers can save as much as $50 or more annually in electricity costs by unplugging these old household appliances. From June 1991 to November 1991 there were 402 refrigerators and 103 freezers recovered. The utility is evaluating this pilot program to determine if it should be expanded to the estimated 50 000 older refrigerators/freezers in the province.

The Corporation has further enhanced its energy conservation program by announcing a new load reduction target of 285 megawatts (MW) by the year 2001, up 185 MW from the previous target. The new target comes

about as a result of a comprehensive study of Manitoba's potential and attainable electricity savings. The report recommended a total of 17 programs that the utility can utilize to achieve the new savings in energy reduction.

PUBLIC ACCOUNTABILITY

Pursuant to The Crown Corporations Public Review and Accountability Act (The Crown Corporations Act), Manitoba Hydro held public meetings during the year in Flin Flon, Gimli and Winnipeg. These meetings enabled the public to comment on the Corporation's policies and practices and the issues facing Manitoba Hydro.

Manitoba Hydro also met with the Crown Corporations Council, established under The Crown Corporations Act, to discuss the current strategic issues of the Corporation and appeared before the Legislative Assembly of Manitoba's Standing Committee on Public Utilities and Natural Resources in the past year to review the previous year's Annual Report.

In February 1992, Manitoba Hydro appeared before The Public Utilities Board of Manitoba at a rate hearing in Winnipeg and at a public meeting in Brandon.

SERVICE AREA

Manitoba Hydro's service area, which spans 650 000 square kilometres, is now divided into four regions. A Northern Region, headquartered in Thompson, was created to bring the responsibility for customer service closer to the people being served north of the 53rd parallel. Each Region maintains the responsibility for planning, designing, constructing, operating and maintaining the electrical distribution system in its area. Western Region is headquartered in Brandon, Eastern Region in Selkirk and Central Region in Winnipeg.

Regional staff have the primary responsibility for dealing with customers and they are the day-to-day contacts for service, billing and most other matters. Some 1 550 Regional personnel look after the needs of the Corporation's 377 383 customers.

During the 1991-92 fiscal year, the number of Manitoba Hydro customers grew by 2 138, an increase of 0.6 per cent.

Residential customers grew by 0.6 per cent to reach 330 688. General service and miscellaneous customers totalled 46 695 at March 31, 1992, an increase of 0.2 per cent over last year.

AN "ELECTRIFYING" SIGNING: Senior officials from Manitoba Hydro, the federal and provincial governments and the nine communities that make up the North Central Hydro Electrification Project officially signed the agreement in March to connect the communities to the central power grid. The project is scheduled for completion in 1997.

In 1991-92, a new district office was opened at Cross Lake, a remote community serving 778 customers that were previously served from Norway House some 110 kilometres away.

Following the signing of a four-party agreement in March 1992, plans were announced to link nine communities currently supplied with electricity by diesel generator to the central power grid. The North Central Hydro Electrification Project will bring the communities of God's Lake, God's River, Red Sucker Lake, Garden Hill, Oxford House, St. Theresa Point, Wasagamack, Island Lake and God's Lake Narrows the full benefits of unlimited service. After the completion of this project, scheduled for 1997, there will be six diesel generating sites remaining in the province. An environmental review, scheduled to be completed in early 1993, will determine the route of the transmission line. Final approval for construction will be subject to review by a federal/provincial environmental review panel. The project cost of $110 million will be shared with the federal and provincial governments and Manitoba Hydro.

An enhanced diesel service is now in place in the communities of Brochet and Lac Brochet. Customers, formerly restricted to 15 ampere service, now have access to 60 ampere service. Work is progressing to upgrade the communities of Tadoule Lake in 1994, Shamattawa in 1995 and Pikwitonei and Thicket Portage in 1997. Discussions are also continuing with the federal department of Indian Affairs, the province and the Shamattawa Band regarding a land line into the Shamattawa community. Preliminary discussions for a land line into the communities of Pikwitonei and Thicket Portage have also taken place with the province.

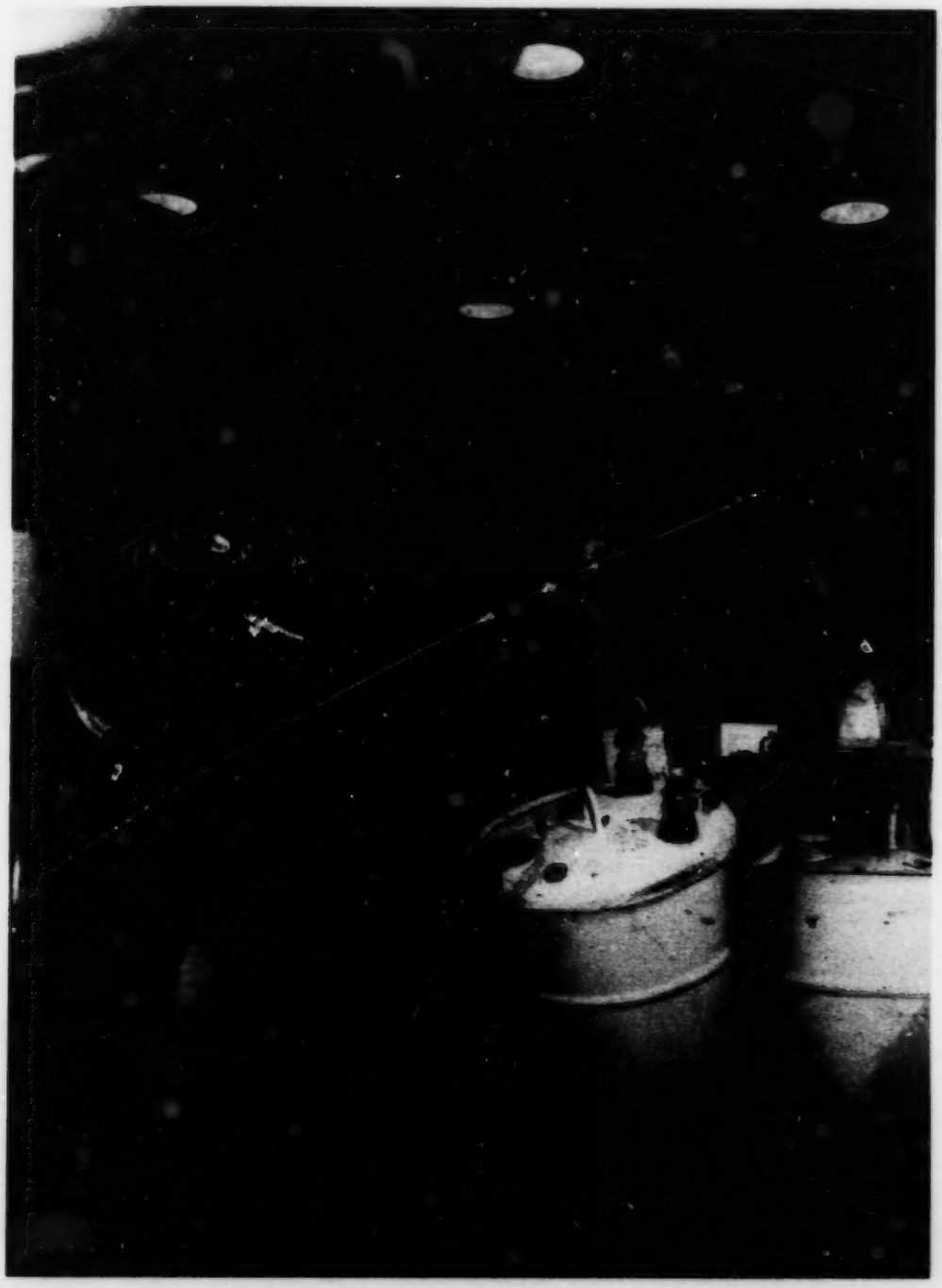
In response to a growing recognition of the importance of quality customer service, a new training initiative in this area was launched in the 1991-92 fiscal year. Aimed at achieving extraordinary customer relations, over 300 customer service staff have attended specialized customer training sessions. These sessions are designed to provide staff with the added skills and knowledge required to improve their service to all customers.

Two storms, one in July and the other in October, caused considerable damage and numerous customer outages. In July, strong winds and heavy rain accompanied by intense lightning caused several areas in central and southeastern Manitoba to be without power for periods ranging from a few minutes to several hours.

During the latter part of October, freezing rains and high winds brought severe icing conditions and resulted in extensive customer outages and damage to Manitoba Hydro equipment. At the height of the storm up to 20 000 customers were without power in a widespread area that included Winnipeg, portions of southcentral Manitoba and the Interlake area. Cost of repairing the storm damage was approximately $2.3 million.

Manitoba Hydro enjoyed good business relationships with many Manitoba companies during the year, purchasing goods and services valued at approximately $168.8 million or 69 per cent of the total business placed. Included in the above business placed in Manitoba is approximately $4.4 million which was placed with northern companies and an additional $1.8 million with northern aboriginal enterprises.

EMPLOYEES



HEAVE, HO!: At the Chevrier Electrical Shop in Winnipeg, Laborer Lena Simmonds prepares to empty the oil from a distribution transformer into an oil pit. The oil will be processed and reclaimed while the transformer will be delivered to a scrap metal yard. Reclamation of material is an ongoing undertaking at the shop.

Manitoba Hydro employees have consistently demonstrated that they are committed to quality and teamwork in what has been a challenging and demanding year for the Corporation.

Employment reached a peak of 4 522 in July 1991, compared to 4 461 in the previous year. The Corporation continues to enjoy the benefits of having a number of long-service employees. As of year-end, the Corporation had 12 employees with 40 years and more of service, 77 with 35 to 39 service years, 530 with 25 to 34 years and 1 356 with 15 to 24 years. A total of 69 employees retired during the year. More than 49 per cent of Manitoba Hydro's total staff work outside of Winnipeg in approximately 90 locations.

Manitoba Hydro continues to support life-long employee learning through a full range of training programs, policies and services. They include Corporate sponsored in-house training in the areas of supervisory and management development, general skill development, apprenticeship training, and specialized technical training programs. Additionally, employees continue to make use of a full range of career development services which include career counselling, tuition rebate programs, professional development programs and on-the-job training.

Three-year collective agreements were negotiated with both the Canadian Union of Public Employees, Local 998 and the Association of Manitoba Hydro Staff and Supervisory Employees which will expire on December 28, 1994 and March 22, 1995, respectively. The current collective agreement between the Corporation and the International Brotherhood of Electrical Workers, Local 2034 expires in May 1992. A proposed two-year settlement was placed before the members in March 1992 and subsequently agreed upon.

EMPLOYMENT EQUITY

Manitoba Hydro continues its commitment to employment equity for women, aboriginal peoples, persons with disabilities and members of the visible minority groups. By ensuring fair access to employment and developmental opportunities, Manitoba Hydro is achieving new levels of success in creating a diverse workforce, representative of the community it serves.

Outreach recruitment included 26 presentations to various career fairs throughout the province. As well, over 200 applicants received pre-employment counselling. Programs designed to assist persons with disabilities to move into the work environment were arranged in partnership with community agencies and the Canadian Union of Public Employees, some leading to full-time employment with Manitoba Hydro.

Bursaries were awarded to 12 exceptional target group students entering first-year studies in a university or community college program related to engineering and technical operations. The Summer Student Work Experience program placed 15 aboriginal high school students in northern operations.

Corporate buildings continued to be modified, and technical aids and adaptive equipment were acquired to accommodate individuals with disabilities.

The Corporation's commitment to setting new standards in employment equity was recognized with two awards received this year from the Society of Manitobans with Disabilities and from the National Access Awareness Week committee.

Proposed purchasing, employment and training policies for northern works were developed over the past year. Feedback on the policies was sought from northern communities and following a review of the comments and concerns raised in those communities, policies will be reviewed.

SAFETY

Safety is a prime concern of Manitoba Hydro. Minimizing the risk of occupational injury and ill health to its employees in all of the Corporation's undertakings is paramount, as is the promotion of the safe use of electricity by its customers. Safety training is basic to the training of all staff, in particular for those who will be working in direct contact with energized electrical equipment.

A comprehensive Management Safety Training program has been developed and is currently being delivered. The program, which covers topics directly related to reducing the risk of injury and occupational ill health to employees, is intended to be delivered to all levels of field management and supervision. Other Canadian utilities have expressed an interest in this project.

Manitoba Hydro continues to support an active Fire Prevention and Protection program. A total of 152 members of the Corporation's 11 Emergency Response crews at generating and HVDC converter stations continue to receive specialized firefighter training. This has included one "live fire" training session either at the Provincial Fire Commissioner's facilities at Brandon or Thompson. A total of 51 new volunteer firefighters received certification by the Provincial Fire Commissioner's Office as Industrial Firefighters and 26 received re-certification. Members of the Emergency Response crews received training in firefighting, first-aid, rescue, spill control and disaster response.

Damage to Corporate property due to fire was minimal with reports of 33 fires, of which 21 involved wood pole fires, in the 1991 calendar year.

Manitoba Hydro's work safety record, in terms of frequency of disabling injuries, ranked among the top four of sixteen major electrical utilities in Canada for the 28th consecutive year. The Corporation placed third in this category in 1991 with the number of disabling injuries decreasing from 8.1 per million hours worked in 1990 to 7.6

LOUIE LOVES A PARADE: And so do Winnipeggers, even when faced with freezing temperatures during the Grey Cup Parade in November. Manitoba Hydro's safety mascot Louie, the Lightning Bug – appearing on the Corporation's float – visited 51 fairs throughout the summer of 1991, cautioning children and adults alike about the dangers of electricity.

in 1991. The Corporation is pleased to report that there were no employee fatalities in 1991. The severity rate for employee injuries in terms of days lost per million hours worked was ranked best among major electrical utilities in Canada in 1991. Manitoba Hydro also ranked first in 1991 in the category of fewest recordable motor vehicle accidents with 3.27 accidents per million kilometres driven.

Employee health and wellness programs continued during the year with a high degree of employee interest and participation.

Manitoba Hydro continues to upgrade programs dealing with the purchase, storage, use, transportation and disposal of regulated products. A program has been implemented, to comply with developing legislation, to identify and purchase less hazardous substitutes for chemicals in use in the Corporation.

A segment of the public continues to express interest and concern regarding health effects alleged to be associated with exposure to electric and magnetic fields from power lines, electrical equipment and household wiring and appliances. Manitoba Hydro has developed a comprehensive booklet on this subject and as well, a series of three bill inserts have been distributed to address the issue. In addition, staff continued to respond directly to concerned customers by providing technical information and field measurements upon request.

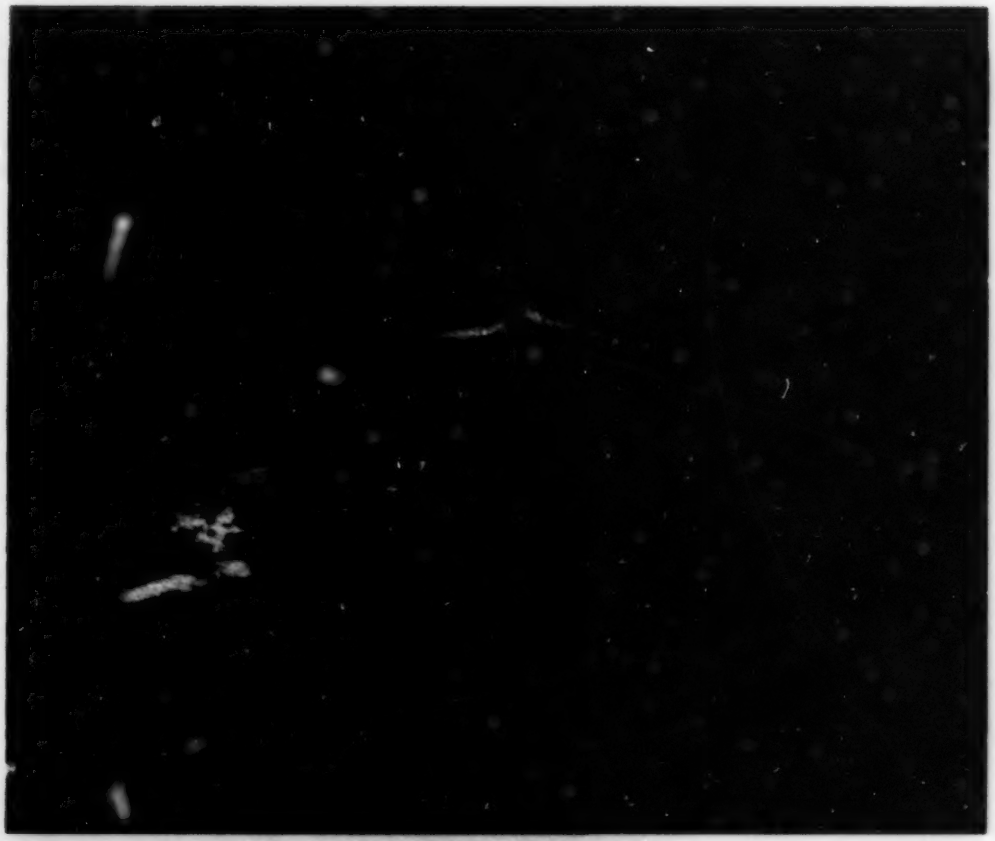
About 400 people attended Farm Safety Day, a new public safety program sponsored and organized by Manitoba Hydro. Held in Hamiota in March 1992, the program involved others concerned with farm safety. The one-day exposition was intended to inform and educate the farm community about the dangers associated with farming and methods for preventing farm accidents.

Also, as a result of increasing concern towards the safety aspect of overhead power lines serving farmyards and the possibility of accidental contact by farm machinery, Manitoba Hydro initiated a pilot program in 1991 to cost-share burying overhead power lines to farmyards with the customer. The pilot program of approximately 30 farms will establish the cost of burying farmyard extensions and test customer response. Eight customers took advantage of the program and it is anticipated the participation rate will increase as the farm economy improves.

Two new safe fishing facilities, in addition to the one at the Pine Falls Generating Station, have been constructed at McArthur Generating Station on the Winnipeg River and at Jenpeg Generating Station on the Nelson River. This program will be extended to other hydro generating stations to improve the safety of the fishing public.

FARM SAFETY DAY: About 400 people gathered in Hamiota for a one-day exposition sponsored by Manitoba Hydro to learn about the hazards associated with farming and methods for preventing farm accidents, particularly electrical accidents.

ENVIRONMENTAL MANAGEMENT



CROSS LAKE WEIR: To create and maintain higher water levels on the lake during low water periods, a weir – or dam – was constructed across the centre channel, as shown above. Rock removal of the east channel, shown at right, was undertaken to allow more efficient flows during high water periods. A cofferdam, being removed at left, was put in place across the centre channel to accommodate the weir's construction.

Addressing environmental issues arising from the development and operation of Corporate facilities continues to be an important priority for Manitoba Hydro.

During 1991-92, Manitoba Hydro received licences for six projects involving distribution stations and transmission lines. The licences were obtained from the Manitoba Department of the Environment and in some cases from the appropriate federal department or agency. Environmental assessment and public consultation activities were a part of the licensing process.

Work also continued on environmental assessments of the Conawapa Complex (Conawapa Generating Station, Bipole 3 transmission complex and Manitoba/Ontario interconnection line) and the North Central Hydro Electrification Project, a plan to connect nine northeast Manitoba communities to the central supply system.

In addition to technical analysis by experts, the assessments involve extensive information-sharing and public consultation. During the fiscal year, Manitoba Hydro organized and participated in 37 open houses, workshops, community and individual meetings throughout the province to provide information and obtain input from interested and potentially affected parties. This activity was particularly intensive with communities on the east side of Lake Winnipeg as part of the site selection and assessment work being done for the Bipole 3 transmission line and the Riel Converter Station. Many meetings and open houses were also held in the communities to be served by the North Central project. These sessions provided valuable information for the siting and planning of these projects.

Environmental inspection and monitoring programs associated with construction of the Limestone Generating Station continued. This includes providing support to maintain a Department of Natural Resources Office at the project. Construction of the Conawapa road was carried out in full compliance with stringent environmental standards. A Provincial Environment Act licence and approval from the federal government had been received for the access road and the power line to facilitate construction at the Conawapa site.

As well, Manitoba Hydro meets all the normal regulatory and licensing requirements for a broad range of activities, from weed control on its rights-of-way to obtaining operating licences for its thermal plants.

As part of a new initiative to improve public understanding of the relationship between energy and the environment, Manitoba Hydro began work with the Fort Whyte Centre for Environmental Education. Through the arrangement, the Corporation has committed financial and technical support to the Centre to carry out six programs.

MITIGATION

Manitoba Hydro achieved several significant settlements in the fiscal year with respect to its outstanding obligations for those who have been affected by its projects.

Three settlements were reached between Manitoba Hydro and northern communities to offset the building and operational impacts of the Grand Rapids Generating Station, constructed in the 1960s. In November 1991, a $4 517 000 settlement was reached with The Pas Indian Band and in December, the Cormorant community received $1 151 000 and the Grand Rapids First Nation received $5 036 000.

Another major milestone was the completion of the Cross Lake Weir and related channel improvements. This represented a Manitoba Hydro initiative to address the environmental impacts caused by the Lake Winnipeg Regulation Project, begun in the 1970s. The weir was a joint construction venture between Midnorth Development Corporation, the construction arm of the Cross Lake Indian Band and Vector Construction Limited of Winnipeg. Of the 68 people who worked on the project, 62 were northern aboriginals. The Cross Lake Weir has stabilized the lake levels and has mitigated the lower levels experienced during the open water season. Lake levels are approximately one metre higher than they would have been without the weir.

A significant part of the Corporation's activity has been directed at five Indian Bands which have experienced adverse effects as a consequence of the Churchill River Diversion and Lake Winnipeg Regulation projects. These Bands, along with the Government of Canada, the Province of Manitoba and Manitoba Hydro are signatories of the Northern Flood Agreement (NFA) which was signed in

SETTLEMENT SMILES: Young residents of Cormorant along with Manitoba Hydro President Bob Brennan welcome the financial settlement with the community with smiles. In the fiscal year, settlements with The Pas Indian Band and the Grand Rapids First Nation were also completed. All settlements were related to the impacts of the construction and operations of the Grand Rapids Generating Station, constructed in the 1960s.

1977. This Agreement provides a formal mechanism by which the five Bands can obtain compensation for adverse effects of the projects. The Agreement ensures discussion on cause or extent of adverse effects and facilitates implementation of appropriate response measures. The Agreement allows parties to seek resolution through an arbitrator when required.

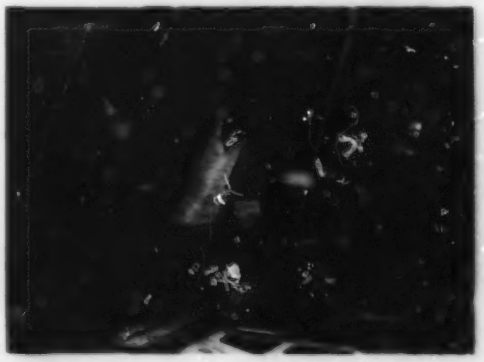
Since 1979, Manitoba has processed over 3 565 claims from individuals who claimed adverse effects with 3 197 settled to the claimants' satisfaction. Approximately 154 of these claims have been rejected outright, 118 were withdrawn and 96 are still under review. In addition, the Bands have filed approximately 161 claims with the Arbitrator, of which 142 involved Manitoba Hydro. Seventy-six of the major claims have been negotiated, six have required review and final award by the Arbitrator and the remaining 60 are still active.

In 1990, the parties to the NFA made a concerted effort to reach a Global Settlement for outstanding claims. However, in the latter part of that year, four of the five Bands to the NFA rejected the Proposed Basis of Settlement fashioned by a team of senior negotiators from all parties. One of the Bands, Split Lake Cree First Nation, elected to pursue a separate settlement agreement based upon the Proposed Basis of Settlement. Final ratification of the Split Lake settlement is expected to be forthcoming from the community in June 1992.

Considerable progress has been made negotiating collaborative community-based settlements with the Nelson House Indian Band. A working group has been established which involves the active partnership of the Nelson House Indian Band as well as representatives from the Province of Manitoba and Manitoba Hydro.

Settlement discussions proceeded with the residents of South Indian Lake through the mechanism of two incorporated bodies, South Indian Lake Housing Authority and the Community Association of South Indian Lake. A successful resolution of settlement discussions was reached in June 1992.

The Churchill River Diversion and Lake Winnipeg Regulation projects allowed Manitoba Hydro to significantly increase the capacity of the Nelson and Burntwood rivers to produce electric power. These projects are essential to the effective operation of the current generating stations



OPEN HOUSE: During the fiscal year Manitoba Hydro organized and participated in numerous open houses, workshops, community and individual meetings throughout the province. Communities on the east side of Lake Winnipeg were particularly involved as part of the site selection and assessment work being done for the Bipole 3 transmission line and the Riel Converter Station.

on the Nelson River including the Limestone Generating Station. To date, Manitoba Hydro has provided in excess of $116.6 million in compensation and remedial measures to alleviate related losses or damages incurred by the communities affected.

MANAGING PCBs

Manitoba Hydro maintains its leadership role in Canada in the handling and treatment of PCB-contaminated material. PCBs (polychlorinated biphenyls) are synthetic oil-like substances that are environmentally persistent and difficult to destroy. PCBs are fire-resistant and very stable. These qualities led to their use as an insulating fluid in various types of electrical equipment. Any fluid containing 50 parts per million (ppm) or more is considered to be contaminated and a possible risk to the environment.

Approximately 80 per cent of the Corporation's estimated total of oil containing more than 45 ppm of PCB has been treated. The PCB decontamination program for electrical apparatus with insulating oil over 45 ppm is nearing completion. In 1985, Manitoba Hydro was the first utility in Canada to purchase a fully operational and proven process to remove PCBs from insulating oil used in electrical apparatus.

In the 1991-92 fiscal year, 1 763 848 litres of oil were treated, bringing to near nine million litres the total volume of oil decontaminated to date.

In addition, a PCB Spill Response Guidebook has been prepared and distributed and training has been provided to 1 200 employees at a series of orientation seminars during the year.

ANALYTICAL SAMPLING: Chemist Nancy Melnychuk, in background, injects an oil sample for PCB analysis into a gas chromatogram. Lab Technician Yen Mendez performs a soil analysis for PCB content using a soxhlet extractor.

DEVELOPMENT PLAN

Manitoba Hydro continues to carry out activities with respect to major capital projects required for power generation and transmission well into the 21st century.

The development plan endorsed by The Public Utilities Board in 1990 involved four major initiatives: the sale of 1 000 megawatts (MW) of electricity to Ontario Hydro for 22 years, starting in the year 2000; diversity exchange agreements totalling 300 MW with two American utilities; refurbishment of Manitoba Hydro's two thermal stations at Brandon and Selkirk; and a 100 MW reduction in the forecasted increase in electrical load by the year 2001.

As part of the continuous updating of its long-term plans and utilizing new information regarding customer energy conservation levels in Manitoba, adjustments have been made to these long-term development plans in the past fiscal year.

As a result of changes to load requirements, energy conservation and supply capability, the 1 390 MW Conawapa Generating Station first power in-service date has been deferred one year from 2000 to 2001. The utility is continuing to propose a 2000 in-service date for the HVDC Bipole 3 transmission line associated with Conawapa to ensure supply reliability to southern Manitoba. The refurbishment and life extension work associated with the thermal stations is continuing to be reviewed. Generation additions planned after Conawapa have been deferred. These changes were made possible in large part because of the Corporation's decision to increase its customer energy conservation target to 285 MW by 2001 instead of 100 MW as included in previous plans. The demand-side management load growth reductions will minimize the cost of serving the electrical energy needs of Manitoba by deferring the need for generation, transmission and distribution capital expenditures.

These changes were made possible because of the Corporation's decision to increase its customer energy conservation target

Activities are still continuing related to design and construction planning for Conawapa. Information is being developed to comply with the provisions of The Environment Act (Manitoba) and other applicable provincial and federal regulatory requirements.

In June 1991, a six-member federal/provincial Environmental Assessment Review Panel was announced to conduct the environmental review and public hearings associated with the Conawapa Generating Station and its related transmission facilities. The Panel started its work and it is anticipated that it will begin public hearings on the project in mid-1992.

A Participant Assistance Committee was established to advise the provincial Minister of Environment with respect to the level of funding to allow various individuals and organizations to participate in the Conawapa Environmental Review. Initial awards, totalling $250 400 have been made to 16 parties to facilitate their participation in the scoping portion of the review. Further awards will be made to participants in later parts of the review.

THERMAL LIFE ASSURANCE

In order to obtain a licence to conduct work related to the Thermal Life Assurance program, an Environmental Impact Assessment of the Selkirk Thermal Generating Station was completed and submitted to the regulatory authorities. The Environmental Impact Study for the Brandon Thermal Generating Station is in progress. The Thermal Life Assurance program includes those retrofits required to ensure that the stations are technically capable of reaching their tentative retirement dates and that they meet current environmental standards.

New forecasts indicate that Brandon Units 1 to 4 may not be required past 1996. Tentative plans are underway to place these units into a long-term lay-up. These plans are being reviewed on an ongoing basis. Some Thermal Life Assurance work that does not involve assuring unit reliability or safety has been cancelled.

MANITOBA-MINNESOTA TRANSMISSION UPGRADES

Sale agreements with Northern States Power and United Power Association (Minnesota) require upgrading of transmission facilities necessary for the 300 MW diversity exchange. A second 500-230-kilovolt transformer will be installed at the Dorsey Converter Station for the 500-kilovolt transmission line to Minneapolis.

ONGOING DEVELOPMENT ACTIVITIES

Engineering and environmental studies on hydroelectric sites for potential future development on the Nelson and Burntwood rivers continue.

Manitoba Hydro is continuing its program to encourage non-utility generation in the province. Numerous expressions of interest were submitted in March 1991. Manitoba Hydro followed by soliciting formal requests for proposals in July of that year. These submissions are being examined in detail and a commitment will be made for any successful programs by the fall of 1992. The program is expected to ensure the least cost electricity resources are developed in Manitoba.

Studies into the water supply on the Saskatchewan and Winnipeg rivers, incorporating increased upstream withdrawals and changes in the reservoir operations, have resulted in new stream flow data for planning purposes. The new data indicates a reduction in long-term average flows as well as a reduced water supply during droughts for the Saskatchewan River and a reduction in dependable flows for the Winnipeg River.

THE MIGHTY NELSON: This site on the Nelson River is the location of Manitoba's next proposed generating station, Conawapa. The high banks in the vicinity will mean that the new flooding associated with the project will be less than four square kilometres. The building of the station and its associated transmission facilities will be a focal point of the Corporation's development plan activities during the next fiscal year when the environmental review and public hearing begins.

POWER SMART

In April 1991 Manitoba Hydro announced the adoption of Power Smart, a theme used to identify energy conservation programs and products aimed at reducing the growth in the consumption of electricity.

Historically, the Corporation has supported conservation programs that promote the efficient use of energy. With Power Smart, the utility's conservation efforts will be enhanced through aggressive programs and new products. Power Smart represents a joint initiative by a number of Canadian utilities to assist customers in the efficient use of electricity.

Even before the name Power Smart was announced, the energy conservation concept was an integral part of the utility's development plan for power generation and transmission into the 21st century and was an important focus at the 1990 public

Darren Windross
Eriksdale School
2nd Prize
Grade 6 (Rural)

hearing into those plans. One component of the plan identified a 100 megawatt (MW) reduction in the forecasted increase in electrical load by the year 2001 through energy conservation known as demand-side management. With the adoption of Power Smart – the leading customer-oriented energy conservation program in North America – Manitoba Hydro is in a better position to influence manufacturers and retailers to produce and promote energy-efficient products and to improve the availability of energy-efficient appliances and energy-saving devices.

In addition to the obvious benefits of saving electrical energy through Power Smart, environmental concerns are also

Darlyne Bautista
Machray School
3rd Prize
Grade 5 (City)

addressed. By conserving energy resources now, construction of future sources of generation can be deferred.

The key to conservation efforts and effectiveness is a range of new technologies that reduce electricity use while providing virtually the same level of service as older technologies. Power Smart programs attempt to educate the consumer about these technologies, and to overcome such market obstacles as price or supply. In many cases consumers are unaware of newer, more energy-efficient technologies and do not know the long-term savings that can be achieved by purchasing a more efficient product.

THE 285 MW TARGET

In November 1991, Manitoba Hydro announced it was increasing the target for demand-side management savings from 100 MW and 500 million kilowatt-hours to 285 MW and 1 049 million kilowatt-hours. This amount of electricity demand is equal to the combined capabilities of the Seven Sisters and Great Falls generating stations on the Winnipeg River.

To achieve this conservation target, Manitoba Hydro plans to invest $400 million developing and implementing Power Smart programs.

The 285 MW target came about as a result of a comprehensive study Manitoba Hydro commissioned from an internationally renowned consulting firm. The study set out a comprehensive set of cost-effective program options for Manitoba Hydro's long-term demand-side management plans. It analyzed consumers' current use of electricity and ways that might help reduce current consumption, taking into account Manitoba's climate and conservation methods.

Manitobans participating in the programs will benefit with lower electricity bills brought about by reduced revenue requirements.

Cory Crocker
Harold Edwards School
2nd Prize
Grade 4 (Rural)

Danny Poole
Sansome School
2nd Prize
Grade 4 (City)

A total of 17 programs were identified in the study, five designed to help residential customers, and 12 targeting the commercial and industrial sectors. Five programs are already in place (outdoor timers, infra-red heat lamps, high-efficiency motors, street lighting and sentinel lighting) plus three pilot programs. All other programs will be operational by 1994.

Three key programs were identified in the study: one, customers with electrically heated homes will be encouraged to adopt extensive cost-effective conservation measures; two, an industrial retrofit program will identify and capture a variety of energy savings in industrial buildings such as the promotion of cost-effective lighting, air conditioning, and motors; and three, with 35 per cent of the commercial sector's energy demands attributable to lighting, a specific program will be developed to address this single largest energy use for commercial customers.

The success of Power Smart programs is highly dependent on achieving the levels of public participation estimated for each program. Manitoba Hydro maintains that the critical factor will likely be the attitude and acceptance of Manitobans towards Power Smart programs and energy conservation.

SYSTEM DEVELOPMENT

LIGHTING UP THE FUTURE: Celebrating an engineering and construction achievement, distinguished guests, project and contractor personnel, gathered in September 1991 to mark the official opening of the Limestone Generating Station. With eight units now in operation, Limestone will be Manitoba Hydro's largest station with a rated capacity of 1 330 megawatts once the remaining two units are completed in the upcoming fiscal year.

LIMESTONE GENERATING STATION OFFICIAL OPENING

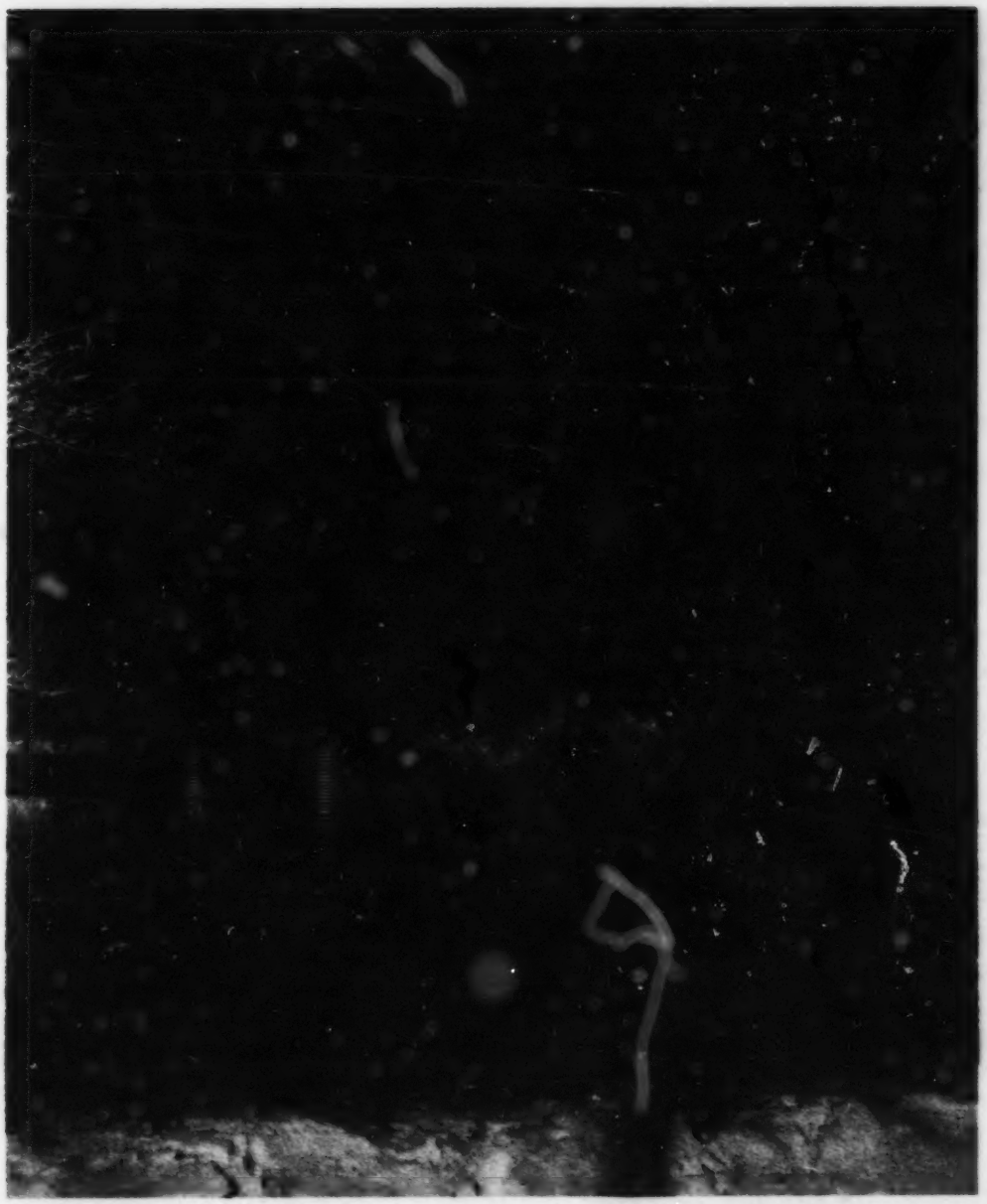
The Limestone Generating Station was officially opened on September 5, 1991 with a ceremony attended by over 200 guests. The engineering and construction achievement was commended as a project that came in "ahead of schedule and under budget". Guests included Premier Gary Filmon, the Honorable Harold Neufeld, Minister of Energy and Mines, and representation from the construction project's major contractors and suppliers. Limestone, with a rated capacity of 1 330 megawatts, is Manitoba Hydro's twelfth hydraulic generating station.

During the fiscal year, the Limestone Generating Station produced power from eight units with the remaining two units scheduled to be in service for August and November 1992.

The estimate for the Limestone Generating Station has fallen over the course of the construction sequence to less than $1.45 billion in 1991-92. The General Civil Contractor completed its work and is currently demobilizing and cleaning up. Installation continues on the turbines and generators. Electrical and mechanical system installation and painting continues in the powerhouse.

Work will continue throughout 1992 on the installation, testing and commissioning of Units 9 and 10. Plans are underway for mothballing the town of Sundance and the Limestone camp until such time as other work commences in the area.

Additional reactive power compensation has been installed at Dorsey Converter Station as a requirement for Limestone Generating Station power being transmitted by the HVDC system. Installation of three-300 MVAR synchronous compensators has been completed, with the last machine being placed in service in March 1992.



CARRYING THE LOAD: A familiar fixture along Manitoba roadways, these wood pole distribution lines carry their vital cargo of power to farm, town and city alike. Each year, Manitoba Hydro continues to upgrade and expand its transmission and distribution systems in order to meet customer demand and improve service reliability.

TRANSMISSIONS AND STATIONS

Manitoba Hydro continues to upgrade and expand its transmission and distribution systems in order to meet increased customer demand and to improve reliability of service.

During 1991-92, the Corporation established a major new supply to the western Manitoba area by placing in service a 230-66-kilovolt station, five kilometres west of Virden. Along with this facility a new 47-kilometre 230-kilovolt line was built north from Reston to the new Virden West Station. This line will eventually form part of a Reston-Virden-Birtle-Raven Lake loop that will reinforce the southwestern part of the province.

A third 230-kilovolt transmission line was constructed between the Dorsey Converter Station and the LaVerendrye Station in southwestern Winnipeg. The line will increase the capacity available to the southern part of Winnipeg as well as improve the reliability of the supply both to the city and from the 230-kilovolt U.S. interconnection line at LaVerendrye. The scheduled in-service date for this transmission line is April 1992.

In order to increase the reliability of the HVDC system, half of the existing Bipole 1 mercury arc valves are being replaced with thyristor valves at both the Dorsey and Radisson converter stations. Contracts have been awarded for the replacement of three mercury arc valve groups.

During 1991-92, there were 45 distribution station capacity upgrades including new stations at Crossing Bay, Libau, Foxwarren, Richer and Waterhen. Capacity increases have taken place at Transcona-Atwood, Whiteshell, Cranberry Portage and Beausejour terminal stations. Major equipment upgrades were completed at Richer-South, Kirkfield, Transcona and Glenboro terminal stations.

The construction of the Bipole 2 spare DC Nelson River crossing began in January 1992 and is scheduled to be in service in the fall of 1992. The line will provide a backup to the existing Bipole 2 Nelson River crossing and will reduce the risk of a power loss to southern Manitoba in the event of the failure of the existing crossing.

TRADING ELECTRICITY

Manitoba Hydro built its first tie-line to extraprovincial markets in 1956. Manitoba Hydro's system is directly interconnected with Saskatchewan, Ontario and the United States, with ten points of interchange into these markets. Manitoba Hydro exports/imports electricity to/from utilities in both the midwest and northcentral regions of the U.S.

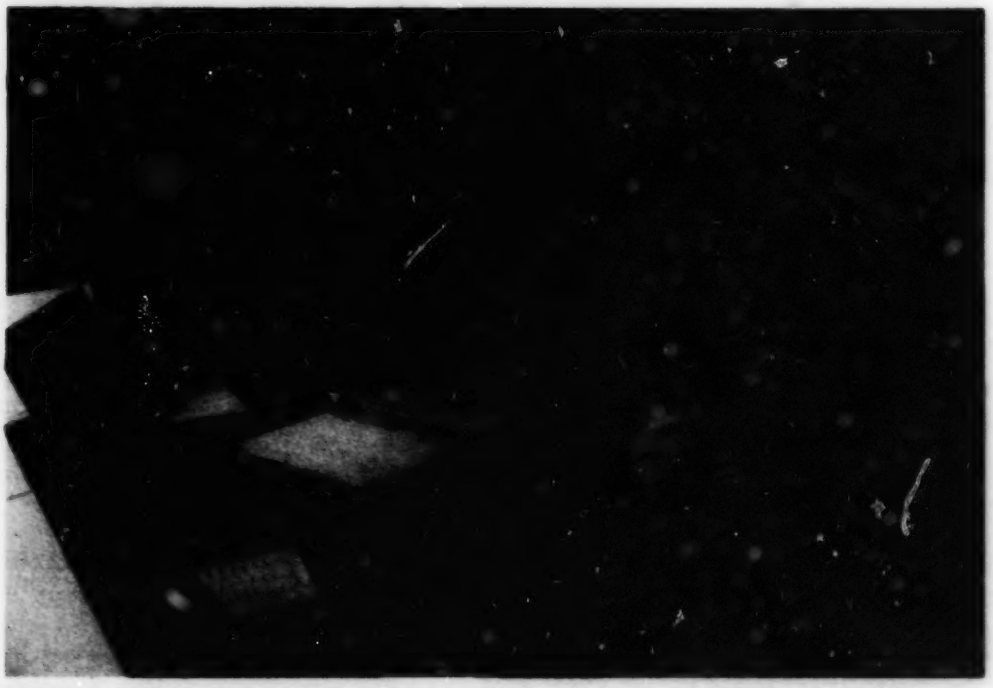
The ability to trade electricity among Manitoba's neighbors benefits Manitoba Hydro customers in several ways. Because Manitoba Hydro's system is built to ensure a supply of power to Manitobans during periods of low water flows, there will always be surplus power to trade whenever water flows are high. The surplus energy sold to neighboring utilities provides a valuable source of revenue. Without these sales, electricity rates in Manitoba would be significantly higher than what customers pay today.

Interconnections also offer the opportunity to trade surplus capacity in the form of seasonal diversity exchanges of power.

Generally, Manitoba Hydro's electricity demands tend to peak with winter heating requirements, while U.S. utilities face peak demands in the summer for air conditioning. The ability of Manitoba Hydro and an interconnected trading partner to exchange capacity in this way helps to defer the building of new generating facilities for both utilities by better utilization of installed resources on both systems.

Interconnections also strengthen the reliability of Manitoba's power system. Manitoba Hydro is linked to electrical systems which in total are about 20 times the size of the Manitoba system, allowing the utility to draw upon the reserve resources of all interconnected utilities during emergencies. These interconnections are also advantageous in periods of drought as the lowest cost energy available can be purchased to supply Manitoba load.

Energy is usually traded in one of two ways. When traded on an interruptible basis, it can be cut off at any time if it is needed to serve the Manitoba load. On a firm basis, as in the 500 megawatt sale to Northern States Power which begins in 1993, the energy to be traded is guaranteed to the purchaser over a certain time period and under certain conditions. In all cases, the contracts specify that the sale will be curtailed if the power is needed to serve Manitoba load. At some point, in the next 10 to 12 years, Manitoba Hydro may be



POWER MARKET: At Manitoba Hydro's System Control Centre, the business of trading electricity takes place on a 24-hour basis with power brokers handling long-term commitments, seasonal planning and day-to-day transactions.

receiving up to 50 per cent of its revenues from extraprovincial sales.

The price of the energy charged in these extraprovincial contracts is different from that charged to domestic customers. Energy purchased from Manitoba Hydro is bought on a "wholesale" basis by the purchasing utility in bulk at high voltage at the border. The neighboring consumer, however, eventually pays for his energy on the same basis as the Manitoba customers – that is, on a "retail" basis which includes all the costs of providing the service. The examples below illustrate that Manitoba customer rates remain competitive with those other utilities.

RESIDENTIAL MONTHLY ELECTRICITY BILL 750 kW.h*

Toronto	$ 68.35
Thunder Bay	$ 64.08
Sioux Falls	$ 63.41
Minneapolis	$ 63.12
Fargo	$ 54.82
Regina	$ 53.09
Winnipeg	$ 42.27

* Bill calculations are performed by each utility based on rates effective May 1, 1992. For U.S. cities the amount shown is an average of summer and winter bills.

REHABILITATION

The Corporation continues to rehabilitate aging facilities throughout the province. Work is in progress or planned on the Winnipeg River system including the rehabilitation of electrical and mechanical systems at McArthur, Pine Falls, Great Falls and Seven Sisters generating stations.

Major upgrading of the McArthur Generating Station spillway was carried out and fire prevention and protection upgrading was performed at the McArthur, Pine Falls and Jenpeg generating stations. As well, Unit 5 at Pine Falls received a complete overhaul that included a new turbine runner and generator rewind.

Refurbishing work at both thermal stations continued throughout the fiscal year. At Brandon, a complete overhaul was undertaken for Units 1 and 2. The overhaul included full inspections of the turbines as part of a regular maintenance program as well as repairs and modifications. Overhaul and maintenance work was also performed at Selkirk.

To meet staffing and maintenance requirements, a new staffhouse is being constructed at the Kelsey Generating Station, 32 single family dwellings were constructed in Gillam, and a new maintenance building addition was constructed at the Brandon Control Centre.

THE GRAND RAPIDS INCIDENT

On March 10, the Grand Rapids Generating Station on the Saskatchewan River shut down, following a failure of the bolts on the headcover on Unit 1 of the station's four generating units. Within minutes, water had flooded the lower portions of the station's powerhouse. The failure was the first of its kind in the Corporation's history. The estimated cost of the damage and resulting clean-up is several millions of dollars, and Manitoba Hydro's export revenues have been impacted as a result of the station's shut down. It is expected that Unit 1 will remain out of service for about two years. At fiscal year-end, extensive engineering analysis was continuing following one of the most unusual incidents in the Corporation's history.

The damage to Unit 1 and the resulting flooding of the station caused approximately 41 000 litres of hydraulic and lubricating oil to be released from the station's turbine control systems. Most of the oil was contained within the station, but a small

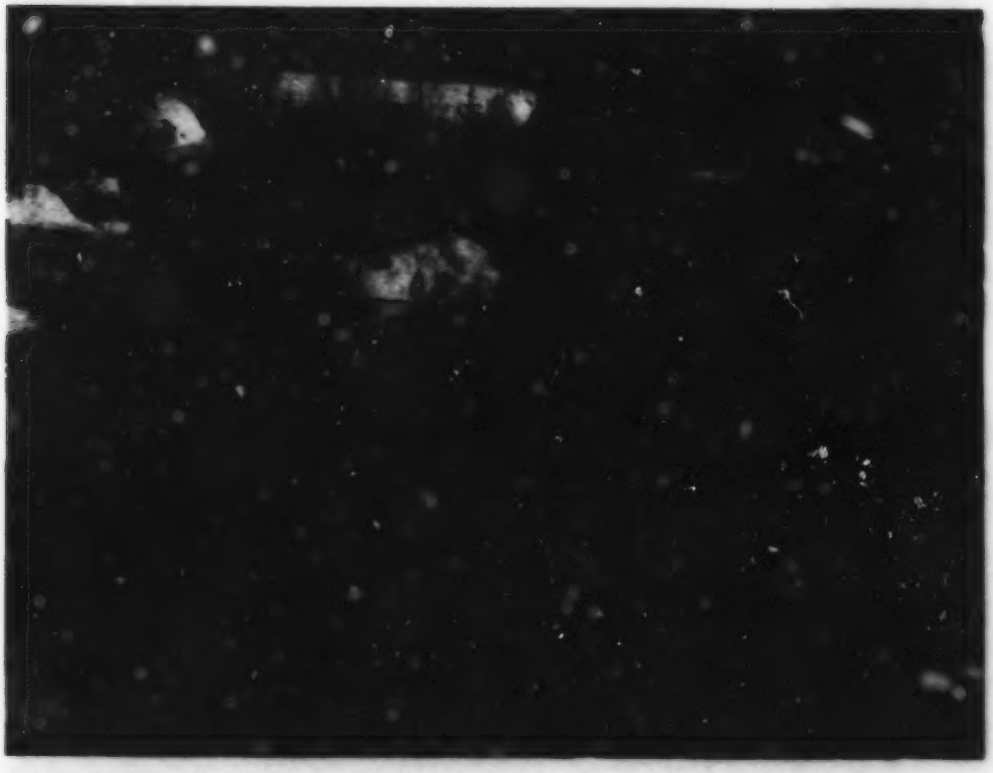
BOOMS AID CLEAN-UP: Containment booms set up by the Canadian Coast Guard kept hydraulic and lubricating oil from moving downstream following the failure of Unit 1 at the Grand Rapids Generating Station. Environmental concerns were quickly alleviated by the fast action of both the Coast Guard and Manitoba Hydro Emergency Response teams.

amount (1 300 - 1 800 litres) escaped from the station into the river channel during the early moments of the accident.

Environmental concerns related to the spill were quickly alleviated by the fast action of the Canadian Coast Guard and Manitoba Hydro Emergency Response teams. Containment booms were installed to ensure the oil did not move further downstream. The oil was recovered and all standards established by the Manitoba Environment department have been met.

Environmental monitoring of the operations of Grand Rapids Generating Station will be carried out to ensure that there are no long-term effects of this incident on the local environment.

Grand Rapids was built in the 1960s with the last of its four generating units going into service in 1968. The station, with a capacity of 472 megawatts, represents nine per cent of Manitoba Hydro's total system capability. The loss of the station's capacity was made up through other Manitoba Hydro generating facilities and did not affect electrical service to our customers.



OIL SKIMMERS: A Hydro worker removes a piece of absorbent matting used to skim the oil contained in nearby storage tanks and places it into a drum. The material in the drums was disposed of under the terms and conditions set out by the provincial environmental department. Oil-soaked ice blocks were captured by containment booms and placed into storage tanks and melted through a steam-applied process.

RESEARCH AND DEVELOPMENT/ UTILITY CONSULTING SERVICES

GREEN POWER: At Cook's Creek near Selkirk, a research study is underway to determine the energy efficiency of heat pump technology in greenhouses to provide both heating and cooling.

RESEARCH AND DEVELOPMENT

Manitoba Hydro relies heavily on a wide range of technologies and the utility's research and development activities reflect this broad requirement. Recent projects have covered impacts of Manitoba Hydro's system on the environment and effects of the environment on the Manitoba Hydro system. Those investigations included ways to clean-up old diesel generation sites and the effect of thermal effluent on the reproductive cycle of catfish.

The Corporation is constantly seeking ways to assist customers in the best utilization of electrical resources. Studies in this area included an evaluation of livestock water fountains – electrically-heated versus insulated energy-free, and the use of heat pump technology in greenhouses for climate stability.

Manitoba Hydro is also participating in a national power quality survey, commissioned by the Canadian Electrical Association (CEA) to find out the level of power quality in all parts of Canada and for all types of customers.

A robotic assist device – Smartool 4 – for turbine blade repair was further enhanced under the auspices of Manitoba Hydro's Research and Development program. Smartool 4 will make the job safer and easier for employees involved in turbine cavitation grinding repairs.

Current investigations involve such issues as the rate of evaporation on the prairies and how this affects the reservoirs; tracking rainfall by radar; the prediction of geo-magnetic induced currents that can cause overload on transformers; utilizing thermopile foundations on transmission towers to prevent the damage caused by frost-heaving; how weather forecasts can be used to assist in predicting the system load; and the process of collecting satellite data for ice management.

UTILITY CONSULTING SERVICES

Manitoba Hydro continues to supply consulting and training services to customers around the world in conjunction with other utilities, engineering consultants and/or electrical industry suppliers.

Projects undertaken are generally funded by government supported agencies such as the Canadian International Development Agency (CIDA) or the World Bank. Services are offered on the basis of recovery of direct costs plus a margin for overhead and profit.

During 1991-92, eight employees were stationed overseas for all or part of the year and a number of other staff members were involved either overseas or in Canada for periods ranging from a few hours to a few months. The cumulative staff involvement was roughly 6.5 person years. During the year, Manitoba Hydro hosted trainees from Zimbabwe, China, Ghana and Brazil. The experience gained by Manitoba Hydro personnel involved in this work is an added benefit to the Corporation and a source of satisfaction and growth for employees. In addition, there is a spin-off of business to other Manitoba companies.

Negotiations have been completed with CIDA to provide nine person years of services during a three-year project in Tanzania, providing much needed expertise in the area of distribution and transmission system maintenance and operations. The project is to start-up by May 1992.

ELECTRICAL PRODUCTION

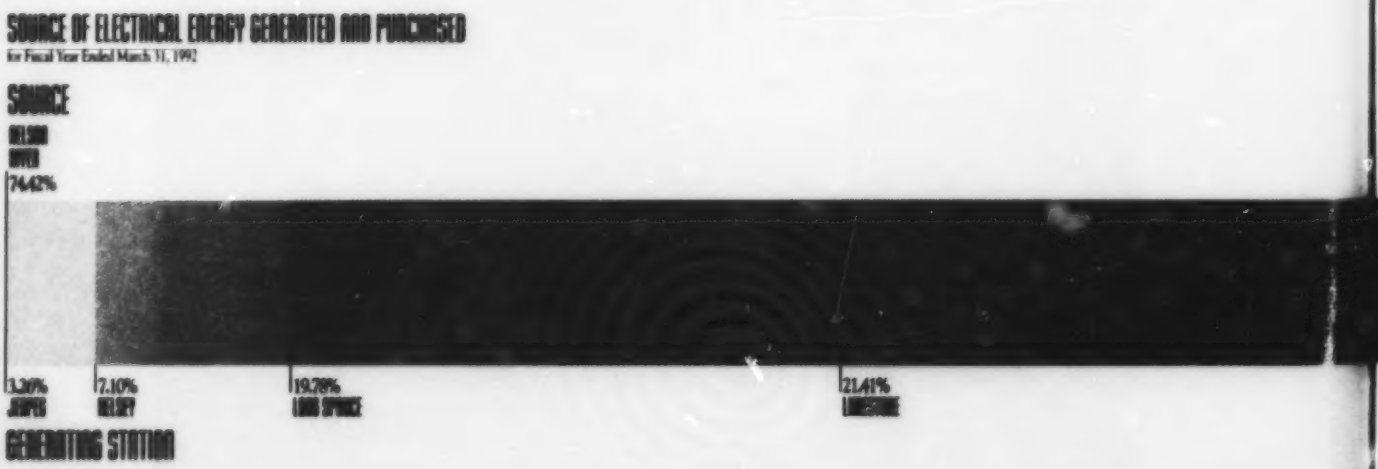
During 1991-92, the energy generated by the 14 hydraulic generating stations in the integrated Manitoba system was 23.6 billion kilowatt-hours, up 14.9 per cent from the 20.6 billion kilowatt-hours generated in the 1990-91 year. The record for annual hydraulic production in Manitoba was achieved five years ago when 24.0 billion kilowatt-hours were generated.

The total amount of energy generated and imported during 1991-92 to meet the requirements of the Manitoba Integrated System and for power sold outside the province was 25.0 billion kilowatt-hours, an increase of 10.4 per cent from the 22.6 billion kilowatt-hours supplied in 1990-91.

Hydraulic generation amounted to 94.7 per cent of the total system supply compared to 90.9 per cent in 1990-91. The remainder was 1.3 per cent thermal and 4.0 per cent imports.

The stations on the Nelson River produced 74.4 per cent of the system supply compared to 67.1 per cent in 1990-91. The increase was due to the availability of new generation from four Limestone units commissioned in 1991-92.

Generation from the Winnipeg River stations totalled 15.6 per cent of system supply, compared to 15.8 per cent generated in 1990-91. Hydraulic generation on the Winnipeg River increased in spite of below-normal flows during the summer of 1991 because heavy fall rains improved the water supply conditions, resulting in near optimal



flows from November through March 1992.

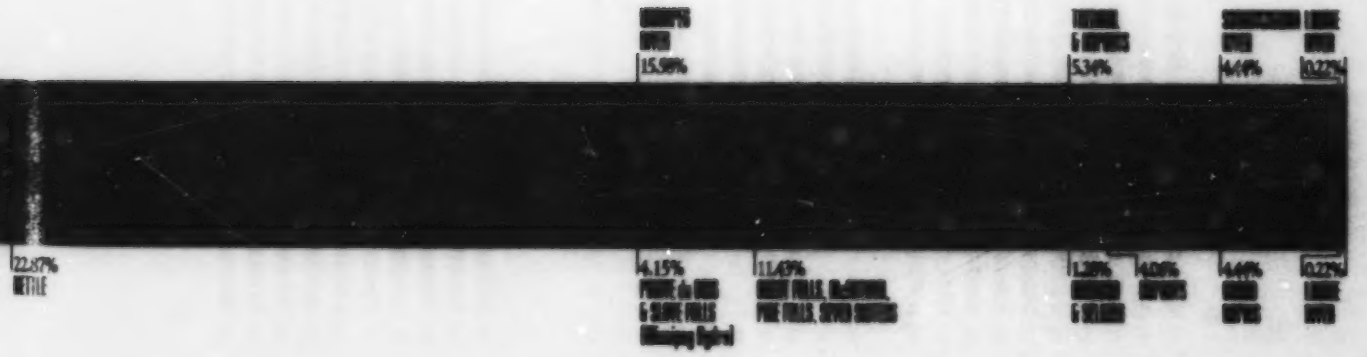
Generation at Grand Rapids on the Saskatchewan River was down 38.2 per cent from the previous year because the winter of 1991-92 was the fourth mildest on record and because of the incident at the generating station in March 1992.

Thermal generation was required for system security and area voltage support during the year and totalled 320.7 million kilowatt-hours, up 11.1 per cent from the 288.6 million kilowatt-hours generated last year. Brandon Generating Station produced 88.8 per cent of the total, while Selkirk Generating Station produced 11.2 per cent.

A total of 17.7 billion kilowatt-hours of electricity were required to meet the needs of Manitoba Hydro customers during the year, an increase of 1.1 per cent from the 17.6 billion kilowatt-hours required in 1990-91. The peak demand for electricity on the Manitoba system was recorded on January 14, 1992 when 3 480 megawatts was reached. This is a decrease of 3.0 per cent from last year's peak demand of 3 586 megawatts reached on December 20, 1990.

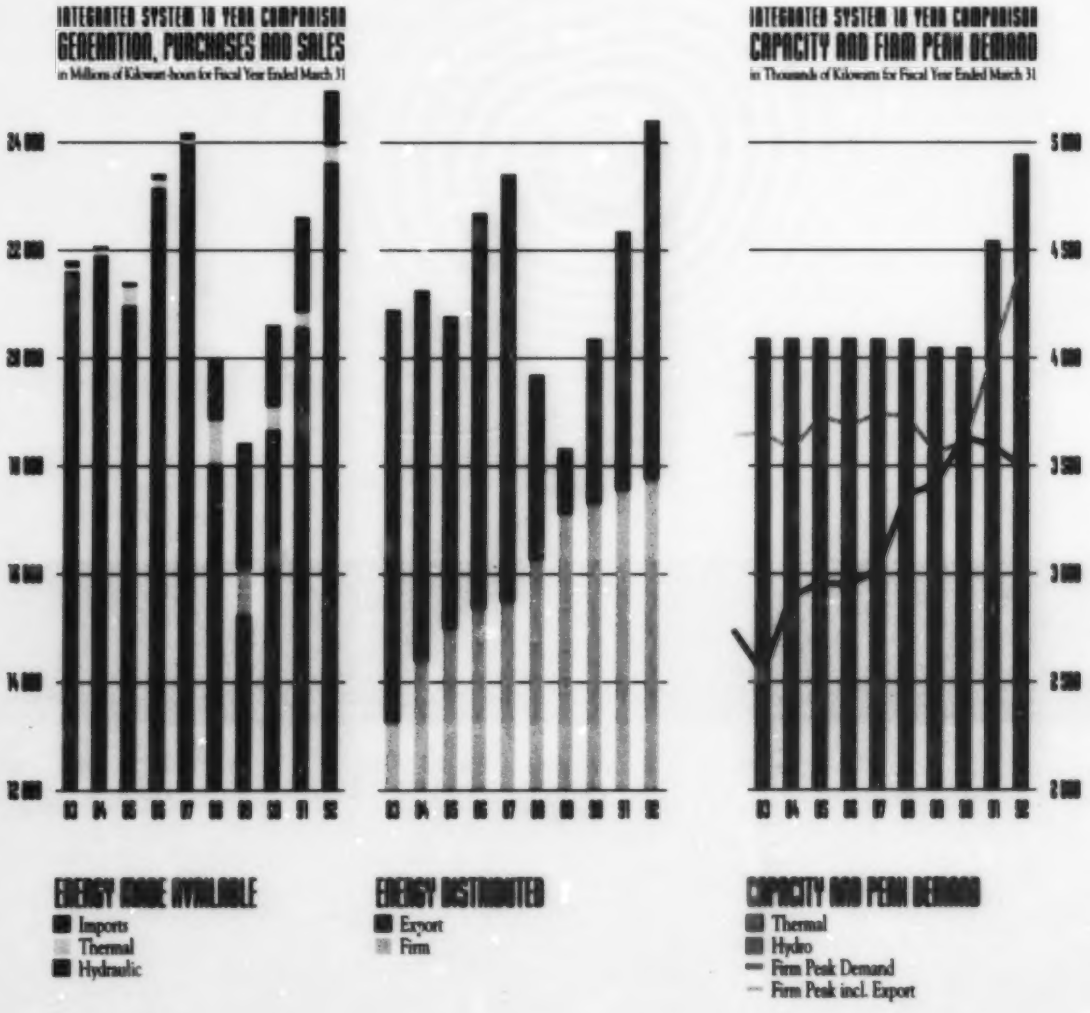
Manitoba continues to supply diesel-generated electricity to 13 communities not connected to the central supply grid. In 1991-92, the supply totalled 23.1 million kilowatt-hours, up 8.5 per cent from the 21.3 million kilowatt-hours provided in 1990-91.

Imports of electricity during the year were reduced 88.6 per cent from the previous



year, to 95.1 million kilowatt-hours from 836.4 million kilowatt-hours. Purchases were 66.1 per cent from the U.S. with the remainder from Saskatchewan. All of the energy purchased was resold for U.S. consumption. The cost of purchases amounted to $0.6 million compared to $10.4 million in 1990-91.

Sales of electricity exported outside the province amounted to 5.7 billion kilowatt-hours, up 48.3 per cent from last year's sales. Revenue from sales of exports totalled $97.0 million compared to $66.6 million in 1990-91. Sales to Ontario accounted for 29.4 per cent of exports, the U.S. for 67.6 per cent and Saskatchewan for 3.0 per cent.



FINANCIAL SECTION

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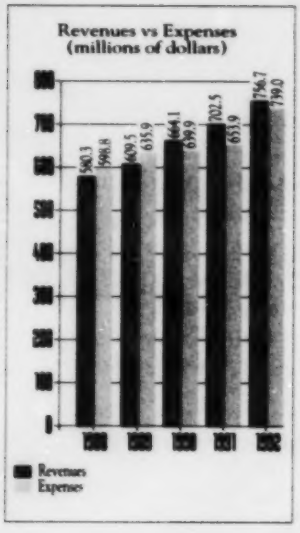
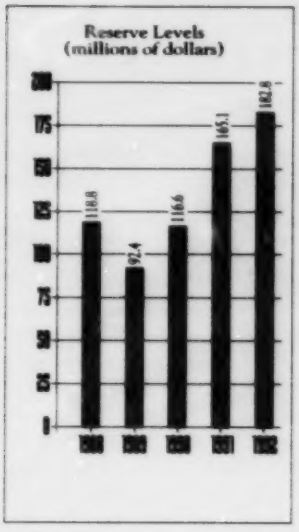
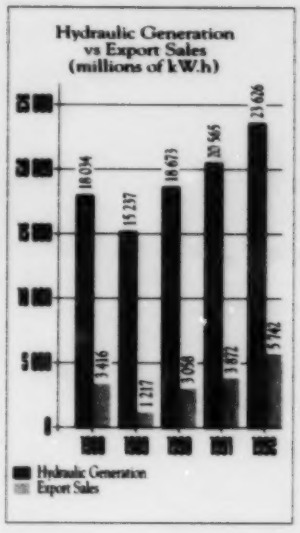
FINANCIAL REVIEW

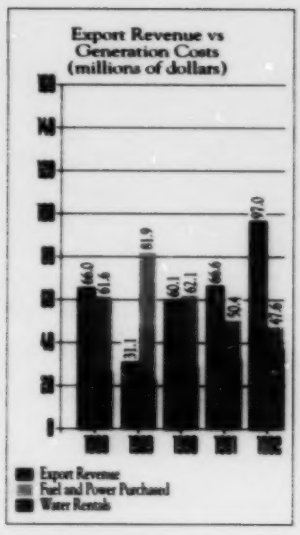
Manitoba Hydro's net income for the year ended March 31, 1992 amounted to $17.7 million compared to $48.6 million for the previous fiscal year. The decrease in net income of $30.9 million was largely due to the effect on hydraulic generation of reduced water flows in the early part of the year and to the financial impact of placing in service the first eight units of Limestone Generating Station. During the year, four of the eight units of Limestone were added to the system with the remaining additional two units to be added in 1992-93. The impact of Limestone on operating results is a normal consequence of adding a new source of electricity supply to the system.

Net income exceeded expectations by about $15 million in 1991-92 primarily due to the buy-out of a lease agreement pertaining to transmission facilities constructed in the late 1960s between generating stations on the Nelson River and the City of Winnipeg. The lease agreement was entered into in 1966 between Canada and the Province of Manitoba and Manitoba Hydro was responsible for operating and maintaining the facilities. The lease agreement provided for repayment by the Corporation of the capital cost of the transmission facilities over a term of 45 years commencing in 1975. Lease payments were structured to provide economic relief to ratepayers during the early years of the Nelson River development with substantially higher payments during the later years. Payments over the remaining 28 years of the lease agreement were scheduled to be $25.9 million per year. Inasmuch as the major benefits of the lease agreement have now been realized, this was an opportune time for the Corporation to negotiate the lease buy-out. In addition to the favorable impact on operating results in 1991-92, the lease buy-out will result in lower charges to operations in future years than otherwise would have occurred with a continuation of the lease agreement.









The financial reserves of the utility increased from $165.1 million at March 31, 1991 to $182.8 million at March 31, 1992. This is still well below the short-term reserve level target of $370 million as set out in the Financial Objectives.

Total generation from the Manitoba integrated system amounted to 23.9 billion kilowatt-hours, an increase of 3.1 billion kilowatt-hours over the previous fiscal year. In addition to a 3.8 billion kilowatt-hour increase in generation from the new Limestone Generating Station, generation was also up on Winnipeg River plants by 0.3 billion kilowatt-hours. Partially offsetting these increases, generation at Grand Rapids was down by 0.7 billion kilowatt-hours and generation at other Nelson River plants was lower by 0.4 billion kilowatt-hours.

The net increase in hydraulic generation reduced the requirement for power purchases from 0.8 billion kilowatt-hours in 1990-91 to 0.1 billion kilowatt-hours in 1991-92. Improved water flow conditions during the final quarter of the 1992 fiscal year resulted in year-end reservoir levels being slightly higher than normal.

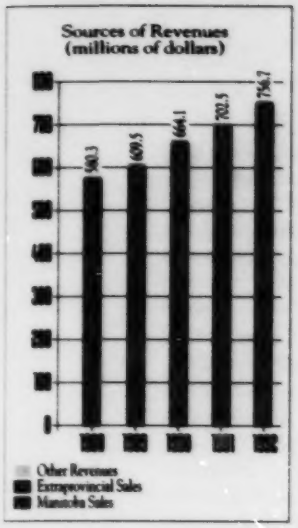
REVENUES

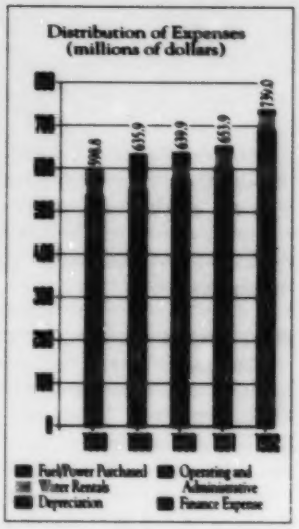
Revenues from the sale of power within Manitoba amounted to $653.1 million in 1991-92, an increase of $25.0 million or 4.0% over the previous year. Revenues from sales to Manitoba Hydro's general consumers rose by 3.7% to $599.3 million. This increase was almost totally due to an average 3.5% general consumers rate increase implemented April 1, 1991. Total energy sales to general consumers remained virtually unchanged from the previous year at 13.0 billion kilowatt-hours. This was mainly attributable to the mild weather conditions experienced in Manitoba over the winter of 1991-92 which was the fourth mildest on record. On a weather-adjusted basis, total energy sales to general consumers increased by about 1.5% over the previous year.

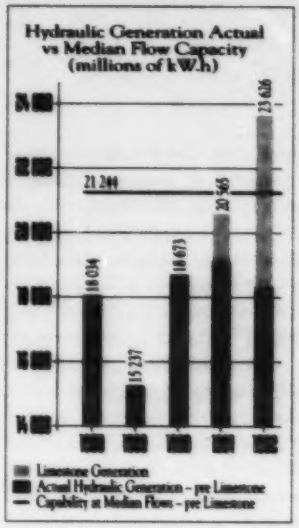
Revenues from sales of power within Manitoba include revenue received from Winnipeg Hydro under the terms of a cost-sharing agreement. In 1991-92, revenues from Winnipeg Hydro amounted to $53.8 million, an increase of 7.5% over the previous year. The increased revenue from Winnipeg Hydro was the net impact of the sharing of additional costs and extraprovincial revenues in accordance with the agreement.

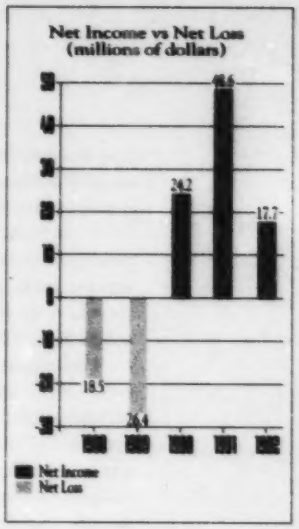
Revenues from extraprovincial sales of power amounted to $97.0 million in 1991-92, an increase of $30.4 million or 45.8% over the previous year. The substantial increase to extra-provincial revenues was possible because of the additional energy available from Limestone Generating Station.

Energy sold to extraprovincial markets in 1991-92 amounted to 5.7 billion kilowatt-hours, an increase of 1.9 billion kilowatt-hours over the previous year. Of the total energy sales, 68% were to the United States, 29% to Ontario and 3% to Saskatchewan. The average selling price was 1.71 cents per kilowatt-hour which was only slightly lower than the average of 1.73 cents in the previous year. The unit price was maintained despite a 48% increase in extraprovincial energy sales volume.









OPERATING AND ADMINISTRATIVE EXPENSES

Manitoba Hydro's operating and administrative expenses amounted to $237.5 million in 1991-92, a decrease of $16.4 million compared to the previous fiscal year. The decrease reflects the impact on operating and administrative expenses of the transmission line lease buy-out transaction which reduced this category of expenses by $25.9 million in 1991-92. Removing the impact of the lease buy-out, other operating and administrative expenses rose by $9.5 million or 4.1% over the previous year. Expenses were held to this relatively low rate of increase despite the incurrence of abnormal costs associated with ice and wind storms of $2.8 million during the year. Adjusting for storm costs, operating and administrative expenses increased by 2.8% in 1991-92.

FINANCE EXPENSE

Finance expense amounted to $339.4 million in 1991-92, an increase of $82.8 million over the previous fiscal year. Of this increase, $59.1 million was attributable to the placing in service of additional units of Limestone Generating Station. The increase to finance expense attributable to Limestone is in accordance with the Corporation's policy of charging finance expense to operations once a transfer to plant in service is made. This allocation of finance expense between capital and operations provides for an equitable allocation of costs between current and future customers. In addition to finance expense attributable to Limestone, $9.0 million of financing cost was charged to operations related to the lease buy-out transaction. The remainder of the increase to finance expense was largely due to the financing costs of other projects coming into service during the year.

DEPRECIATION

Depreciation expense amounted to $114.5 million in 1991-92, an increase of $21.5 million or 23.2% over 1990-91. The increase includes $10.7 million of additional depreciation related to the first eight units of Limestone and $4.0 million related to the purchase of the previously leased high voltage direct current transmission facilities. The balance of the increase to depreciation expense was associated with other additions to fixed assets during the year.

WATER RENTALS

Water rental costs are incurred for the use of provincial waters by Manitoba Hydro in the operation of its hydroelectric generating stations. These costs, including $0.5 million for associated land rentals, amounted to $37.7 million in 1991-92, an increase of $5.1 million over the previous year. The increase was mainly due to the additional generation related to the operation of Limestone Generating Station.

FUEL AND POWER PURCHASED

Fuel and power purchased costs amounted to $9.9 million in 1991-92, a decrease of $7.9 million or 44.5% from the previous year. The reduction was due to the additional hydraulic generation provided by Limestone Generating Station which enabled the Corporation to reduce

its purchases of power from neighboring utilities to $0.6 million in 1991-92. The cost of thermal generation increased from $5.3 million to $6.6 million which was primarily related to system requirements during transmission line outages for maintenance.

CAPITAL EXPENDITURES

Additions to fixed assets totalled $705.8 million in 1991-92 including an amount of $198.1 million related to the purchase of the previously leased high voltage direct current transmission facilities. This is compared to an amount of $440.2 million added to fixed assets in the previous fiscal year.

Expenditures for Limestone and related system requirements amounted to $147.2 million compared to $250.1 million expended last year. Costs associated with replacement of mercury arc valves with thyristor valves at Dorsey and Radisson converter stations amounted to $54.3 million. Preliminary expenditures related to the proposed Conawapa Generating Station for environmental studies, engineering and exploration, an access road and capitalized interest on previous expenditures amounted to $37.0 million during the year.

Provisions were made during the year for costs related to the impacts associated with the Lake Winnipeg Regulation and Churchill River Diversion projects. This included a provision of $30.7 million for a settlement agreement with the Split Lake Cree First Nation, one of the five Indian Bands which were party to the Northern Flood Agreement of 1977. Compensation payments related to the development of Grand Rapids Generating Station, totalling $11.4 million were made to Grand Rapids First Nation, The Pas Indian Band and the Community of Cormorant. In addition, a liability of $55.0 million was recorded for future mitigation settlements pertaining to the Corporation's northern development projects and this amount was charged to fixed assets in 1991-92.

Approximately $29.5 million was spent on other major generation and transmission facilities including an amount of $10.4 million for the refurbishing of generating units and associated facilities at the Selkirk and Brandon thermal generating stations. The remaining capital expenditures were for other system additions, modifications and service extensions throughout the province.

LIMESTONE GENERATING STATION

The eighth unit of the Limestone Generating Station commenced regular operation on March 18, 1992. Unit nine will be placed in service in the summer of 1992 with the tenth and final unit scheduled to be placed in service by November 1992. Upon completion, Limestone will be the utility's largest generating station with an installed capacity of 1 330 megawatts. Generating capacity at March 31, 1992 amounted to 1 064 megawatts. The estimated total cost for Limestone is $1 448 million with $1 402 million spent to date.

FINANCING

The Corporation utilizes cash from both operations and external borrowing to finance capital construction. Cash provided by operating activities in 1991-92 was $170.9 million (1990-91 – $158.2 million). During the year the Corporation arranged a record amount of new borrowing with proceeds equal to $1 594.3 million (1990-91 – $760.5 million). Of this borrowing, $1 214.8 million was arranged through traditional capital markets with the remainder being raised through the issue of Manitoba Hydro Savings Bonds – Series 3. Debt maturities during the year amounted to $798.5 million (1990-91 – $396.9 million) including $512.9 million resulting from call options exercised on four U.S. dollar issues which were refinanced at a lower coupon rate.

MANITOBA HYDRO SAVINGS BONDS

On May 1, 1991, the Minister of Finance announced the issue of Manitoba Hydro Savings Bonds – Series 3. HydroBonds were issued as monthly interest, annual interest, or compound interest bonds and were purchased by 30 000 Manitobans, providing proceeds of $379.5 million for general Corporate purposes.

HydroBonds – Series 3 have a five-year term with a minimum guaranteed annual interest rate of 9.25% (8.88% monthly) for the first year and a minimum guaranteed rate for the remaining four-year term of 8.00% (7.72% monthly). The bonds are redeemable at par plus accrued interest for a one-week period commencing June 15 and December 15 of each year prior to maturity.

HydroBonds – Series 4 was announced on April 24, 1992 by the Minister of Finance for sale during the period May 19 to June 6, 1992. The bonds have the same terms and conditions as Series 3. The interest rate on the issue has been set at 7.25% (7.02% monthly) guaranteed for the first year and 7.00% (6.78% monthly) guaranteed for the remaining four-year term.

EXPOSURE MANAGEMENT PROGRAM

The Corporation limits the potential adverse financial impact of U.S. dollar fluctuations through its exposure management program. The program strategies specifically address U.S. dollar exposure by entering into U.S. dollar financing, U.S. dollar investments and other monetary agreements. These effectively offset the U.S. dollar debt payments with the U.S. dollar export revenues and also limit the annual increase or decrease in net U.S. dollar exposure within defined program limits.

RATES REVIEW

Manitoba Hydro's rates for electricity sales within the province are subject to review and approval by The Public Utilities Board of Manitoba. In its Order No. 25/92, The Public Utilities Board approved an average rate increase to general consumers of 2.65% to be effective April 1, 1992. The rate increase is forecast to generate additional revenues for the Corporation of $16.6 million in the 1992-93 fiscal year.

FINANCIAL OBJECTIVES

The Corporation has established financial targets to enhance its financial strength, to contribute to rate stability and predictability, and to protect the Corporation and its customers from a variety of risks.

Specific financial targets together with an implementation schedule have been established by the Corporation as follows:

- The short-term financial target is to achieve reserves sufficient to withstand the financial effects of two years of drought equal to the worst on record plus a provision for the maximum third-party loss the Corporation could incur under its self-insurance program. The short-term target has been set at $370 million and it is projected that the target will be attained by 1995-96.
- The long-term financial target is to attain an 85:15 debt/equity ratio by 2004-05. In moving towards this goal the Corporation will attempt to maintain a gross interest coverage in the 1.15 to 1.25 range. For purposes of rate stability, the gross interest coverage target may be deviated from immediately prior to and during the periods in which new major capital facilities are being absorbed into the rate base.

The Corporation's interest coverage ratio decreased from 1.11 in 1990-91 to 1.04 in 1991-92. The debt/equity ratio of 96:04 at March 31, 1992 was unchanged from the previous year.

FINANCIAL OUTLOOK

Manitoba Hydro's current financial projections indicate that the financial strength of the utility will substantially improve over the next several years. It is projected that financial targets will be achieved with rate increases that are closely aligned with inflation over the next two years and significantly lower than projected inflation over the longer term. The positive financial outlook for Manitoba Hydro is largely due to the favorable impact that extraprovincial sales revenues will have on electricity consumers in Manitoba. Major firm power sales include a 500 megawatt sale to Northern States Power commencing in 1993 and extending to 2005, a 200 megawatt sale to Ontario Hydro from 1998 to 2003, and a 300 megawatt seasonal diversity exchange with two U.S. utilities starting in 1995 and ending in 2014. A 1 000 megawatt power sale to Ontario Hydro starting in the year 2000 and extending for 22 years is contingent upon receiving environmental approvals for the required facilities.

MANAGEMENT REPORT

The accompanying financial statements are the responsibility of management and have been prepared in accordance with accounting principles generally accepted in Canada, applied on a basis consistent with that of the preceding year. In management's opinion the financial statements have been properly prepared within reasonable limits of materiality, incorporating management's best judgement regarding all necessary estimates and all other data available up to June 12, 1992. The financial information presented elsewhere in the Annual Report is consistent with that in the financial statements.

Management maintains internal controls to provide reasonable assurance of the reliability and accuracy of the financial information and that the assets of the Corporation are properly safeguarded. An internal audit function independently evaluates the effectiveness of these internal controls on an ongoing basis and reports its findings to management and to the Audit Committee of the Board.

The responsibility of the external auditors, Peat Marwick Thorne, is to express an independent, professional opinion on whether the financial statements are fairly presented in accordance with generally accepted accounting principles. The Auditors' Report outlines the scope of their examination and their opinion.

The Audit Committee of the Board meets with representatives of the external auditors, the internal auditors and management to satisfy itself that each group has properly discharged its respective responsibility and to review the financial statements before recommending approval by the Board. The Board has reviewed the Annual Report in advance of its release and has approved its content and authorized its publication.

On behalf of Management:

R. B. Brennan, C.A.
President and Chief Executive Officer

J. B. Gessner, C.M.A.
Vice-President Finance and Chief Financial Officer

AUDITORS' REPORT
TO THE MANITOBA HYDRO-ELECTRIC BOARD

We have audited the balance sheet of The Manitoba Hydro-Electric Board as at March 31, 1992 and the statements of operations, reserves and changes in financial position for the year then ended. These financial statements are the responsibility of the Corporation's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the Corporation as at March 31, 1992 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles.

Chartered Accountants
Winnipeg, Canada
June 12, 1992

STATEMENT OF OPERATIONS
FOR THE YEAR ENDED MARCH 31

	1992	1991
	(millions of dollars)	
REVENUES		
Sale of power		
Manitoba	$ 653.1	$ 628.1
Extraprovincial	97.0	66.6
Other revenue	6.6	7.8
	756.7	702.5
EXPENSES		
Operating and administrative	237.5	253.9
Depreciation	114.5	93.0
Water rentals (Note 2)	37.7	32.6
Fuel and power purchased	9.9	17.8
	399.6	397.3
Net income before finance expense	357.1	305.2
Finance expense (Note 3)	339.4	256.6
NET INCOME	$ 17.7	$ 48.6

The accompanying notes are an integral part of the financial statements.

BALANCE SHEET
AS AT MARCH 31

	1992	1991
	(millions of dollars)	
ASSETS		
FIXED ASSETS (Note 4)		
In service	$ 5 602.0	$ 4 521.9
Less accumulated depreciation	1 258.6	1 152.9
	4 343.4	3 369.0
Construction in progress	514.0	897.9
	4 857.4	4 266.9
CURRENT ASSETS		
Temporary investments	587.5	362.5
Accounts receivable and accrued revenue	108.2	121.3
Interest receivable	17.0	17.8
Materials and supplies, at average cost	42.3	41.5
	755.0	543.1
OTHER ASSETS		
Deferred pension expense	132.9	146.3
Other deferred expenses (Note 5)	171.8	50.8
Deferred receivables and advances (Note 6)	17.6	199.0
	322.3	396.1
	$ 5 934.7	$ 5 206.1

Approved on behalf of the Board:

Chairman

Member

	1992	1991
	(millions of dollars)	
LIABILITIES AND RESERVES		
LONG-TERM DEBT (Note 7)	$ 4 092.2	$ 3 884.7
CURRENT LIABILITIES		
Bank balances (Note 8)	7.1	141.1
Accounts payable and accrued liabilities	84.3	101.7
Payable to Canada (Note 4)	198.1	–
Notes payable, due within one year	–	119.5
Accrued interest	133.8	116.4
Current portion of long-term debt	880.1	314.6
	1 303.4	793.3
OTHER LIABILITIES		
Deferred liabilities (Note 9)	109.5	30.4
Pension obligation (Note 10)	130.1	219.5
	239.6	249.9
DEFERRED CREDITS (Note 11)	116.7	113.1
RESERVES	182.8	165.1
	$ 5 934.7	$ 5 206.1

The accompanying notes are an integral part of the financial statements.

STATEMENT OF RESERVES
FOR THE YEAR ENDED MARCH 31

	1992	1991
	(millions of dollars)	
BALANCE – BEGINNING OF YEAR	$ 165.1	$ 116.5
Net income	17.7	48.6
BALANCE – END OF YEAR	$ 182.8	$ 165.1

The accompanying notes are an integral part of the financial statements.

STATEMENT OF CHANGES IN FINANCIAL POSITION
FOR THE YEAR ENDED MARCH 31

	1992	1991
	(millions of dollars)	
CASH PROVIDED FROM OPERATIONS		
Net income	$ 17.7	$ 48.6
Depreciation	114.5	93.0
Amortization of deferred and other expenses not requiring cash	31.0	32.2
Non-cash working capital change	7.7	(15.6)
	170.9	158.2
CASH PROVIDED FROM FINANCING		
Proceeds from long-term debt	1 594.3	760.5
Settlement of amounts receivable from Province (Note 5)	98.1	–
Retirement of long-term debt	(798.5)	(396.9)
Contributions and advances in aid of construction	8.6	9.3
Payable to Canada for purchase of transmission facilities	198.1	–
Decrease in notes payable	(119.5)	119.5
Mitigation liability	55.0	–
Split Lake Cree liability	21.2	–
Sinking fund payment	(61.7)	(57.1)
Other	11.4	(0.4)
	1 007.0	434.9
CASH USED FOR INVESTMENT		
Additions to fixed assets (Note 4)	705.8	440.2
Contributions to Manitoba Hydro Pension Fund	100.8	–
Other assets	12.3	5.3
	818.9	445.5
INCREASE IN CASH	359.0	147.6
CASH AT BEGINNING OF YEAR	221.4	73.8
CASH AT END OF YEAR	$ 580.4	$ 221.4

The components of cash are bank balances and temporary investments.
The accompanying notes are an integral part of the financial statements.

NOTES TO THE FINANCIAL STATEMENTS
FOR THE YEAR ENDED MARCH 31, 1992

NOTE 1 – SIGNIFICANT ACCOUNTING POLICIES

The financial statements have been prepared in accordance with accounting principles generally accepted in Canada.

a) Fixed Assets

Fixed assets are stated at cost which consists of contracted services, direct labor, material and expense, a proportionate share of overhead costs and interest applied at the effective rates incurred in financing construction. Finance expense is allocated to construction until a facility becomes operational or a decision is made to abandon, cancel or indefinitely defer construction.

Main facilities of major projects under construction become operational on a progressive basis. As such facilities become operational, related construction costs and a pro rata share of related common properties are transferred to plant in service. Once the transfer to plant in service is made, finance expense allocated to construction ceases and depreciation and finance expense charged to operations commences.

b) Depreciation

Depreciation is provided on a straight-line remaining life basis. The major components of generating stations are depreciated over the lesser of the remaining life of the major component or the remaining life of the associated generating station.

The range of the estimated service lives of components within each major asset category is as follows:

Hydroelectric generation	40 – 100 years
Thermal-electric generation	35 – 45 years
Transmission lines and stations	20 – 80 years
Distribution lines	10 – 60 years

Provision for removal costs of major fixed assets is charged to depreciation expense on a straight-line basis over the remaining service lives of the related fixed assets. In accordance with group depreciation practices, retirements of fixed assets are charged to accumulated depreciation with no gains or losses reflected in operations.

The estimated service lives of fixed assets and the estimates of fixed asset removal costs are subject to periodic review.

c) Foreign Currency Translation:

Long-Term Debt

i) United States Debt

The impact of foreign exchange fluctuations associated with United States debt has been essentially eliminated through the Corporation's exposure management program which became effective April 1, 1989. Under this program, United States denominated debt is offset against contracted future United States revenue. Accordingly, United States debt arranged prior to April 1, 1989 is translated at the book value in effect at April 1, 1989 after taking into account, where applicable, the Province of Manitoba's settlement of its outstanding obligations with respect to The Energy Rate Stabilization Act pertaining to foreign exchange gains or losses and

the amortization of unrealized foreign exchange gains or losses to March 31, 1989. (See Note 5 for details of the settlement). United States debt transacted after April 1, 1989 is translated at the rate of exchange in effect at the date of issue. United States debt fixed by foreign exchange contract is recorded at the contracted rate.

ii) Foreign Debt Other Than United States Debt

Foreign long-term debt other than United States debt is translated into Canadian currency at rates of exchange prevailing at the date of the balance sheet, or in the case of debt fixed by foreign exchange contracts, at the contracted rate.

Current Assets and Current Liabilities

Current monetary assets and liabilities denominated in foreign currencies, with the exception of the current portion of long-term debt, are translated into Canadian currency at rates of exchange prevailing at the date of the balance sheet. The unrealized exchange gains or losses together with realized exchange gains or losses are credited or charged to operations. The current portion of long-term debt is translated in the same manner as long-term debt.

Sinking Fund Investments

Sinking fund investments denominated in foreign currencies are translated into Canadian currency at the rates of exchange prevailing at the date of the balance sheet, except where the investments have been fixed through monetary contracts by the Minister of Finance of the Province of Manitoba, in which case the contracted rate confirmed by the Province is used in the translation. The unrealized exchange gains or losses are amortized on a straight-line basis over the remaining life of the investment and together with realized exchange gains or losses are credited or charged to operations.

United States Contracted Revenue

Under the exposure management program, future contracted United States revenues have been designated as an offset against United States debt. These revenues will be translated at the book value of the associated United States debt.

Other Transactions

Expense and revenue transactions made in foreign currencies are translated into Canadian currency at the rates of exchange prevailing at the date of the transaction, except transactions covered by monetary contracts which are translated into Canadian dollars at the rates of exchange established by the contracts.

d) Pension Costs

The costs of pension benefits are determined periodically by independent actuaries using the accrued benefit method and management's best estimate assumptions. Pension expense charged to operations is comprised of the cost of pension benefits provided in exchange for employees' services rendered during the year, amortization of the cost of past service benefits, interest equivalent on the pension liability net of pension fund assets and amortization of experience gains and losses resulting from actuarial revaluations.

The unamortized present value of past service benefits and actuarially determined experience gains or losses are recognized in the financial statements as a deferred pension expense and are amortized over the expected average service lives of the employees covered by the plan.

e) Debt Discount and Expense

Debt discount and associated issue costs are amortized to finance expense on a straight-line basis over the life of the respective debt.

f) Discount on Sinking Fund Investments

The Corporation records sinking fund investments at par value. The difference between the cost and the par value of the investments is recorded as a premium or discount and is amortized on a straight-line basis over the remaining life of the investment. Any gain or loss on early disposal is credited or charged to operations.

g) Planning Studies Costs

Planning study costs are recorded as a deferred expense and are amortized on a straight-line basis over a 15 year period. The balance of the unamortized costs of a project which proceeds during the 15 year period are transferred to the capital cost of the project.

h) Demand-Side Management Programs

The costs of Manitoba Hydro's energy conservation programs, referred to as demand-side management or "Power Smart", are deferred and amortized on a straight-line basis over periods up to 15 years. The benefit periods of demand-side management programs are subject to periodic review.

i) Revenues

Customers' meters are read and billed on a cyclical basis. Revenues are accrued in respect of electricity delivered for those cycles not yet billed.

j) Rate Regulation

The prices charged for sales of power within Manitoba are subject to review and approval by The Public Utilities Board of Manitoba in accordance with the provisions of The Crown Corporations Public Review and Accountability Act.

NOTE 2 – WATER RENTALS

Water rental costs are associated with the use of provincial waters by the Corporation in the operation of its hydroelectric generating stations. These costs, including $0.5 million of associated land rentals, amounted to $37.7 million (1991 – $32.6 million).

NOTE 3 – FINANCE EXPENSE

	1992	1991
	(millions of dollars)	
Interest on debt	$ 479.5	$ 428.3
Amortization of discount and expenses	8.3	8.6
Finance expense allocated to construction	(71.9)	(109.8)
Investment income	(76.5)	(70.5)
	$ 339.4	$ 256.6

Included in interest on debt is $11.2 million (1991 – $10.0 million) in respect of the Provincial Guarantee Fee. This fee is calculated at 1/4 of 1% of the total outstanding debt guaranteed by the Province as at the preceding year end.

NOTE 4 – FIXED ASSETS (at cost)

	1992		
	In Service	Accumulated Depreciation	Construction in Progress
	(millions of dollars)		
Generation	$ 3 255.6	$ 559.8	$ 370.3
Transmission	414.7	85.8	15.7
Substations	984.4	280.8	95.2
Distribution	722.3	246.8	16.0
Other	225.0	85.4	16.8
	$ 5 602.0	$ 1 258.6	$ 514.0

Construction in Progress includes $243.7 million (1991 – $698.2 million) in respect of the Limestone Generating Station. During the year four additional units of the Limestone Generating Station commenced operation. Out of a total of ten units, Limestone now has eight units in operation with the final two units expected to commence operation during the 1993 fiscal year.

Included in fixed assets is an amount of $198.1 million representing the purchase price of high voltage direct current transmission facilities acquired September 30, 1991 from Canada. The facilities had previously been operated by the Corporation from 1966 to 1991 under a lease agreement between the Province of Manitoba and Canada.

	1991		
	In Service	Accumulated Depreciation	Construction in Progress
	(millions of dollars)		
Generation	$ 2 543.4	$ 515.8	$ 775.2
Transmission	273.9	79.6	11.6
Substations	829.0	252.4	81.9
Distribution	670.8	227.3	18.2
Other	204.8	77.8	11.0
	$ 4 521.9	$ 1 152.9	$ 897.9

NOTE 5 – OTHER DEFERRED EXPENSES

	1992	1991
	(millions of dollars)	
Unamortized discount on settlement of ERSA receivable	$ 82.1	$ –
Unamortized bond discount and expense	56.4	27.3
Unamortized planning study costs	25.7	19.4
Unamortized Demand-Side Management costs	4.8	0.6
Other	2.8	3.5
	$ 171.8	$ 50.8

The Energy Rate Stabilization Repeal Act was passed into law on July 26, 1991. The Act gave authority to the Minister of Finance to enter into an agreement with Manitoba Hydro to fix the present value of the Province's obligation to Manitoba Hydro under The Energy Rate Stabilization Act (ERSA) and the payment of the amounts so fixed.

The Province of Manitoba and the Corporation entered into an agreement to settle the Province's outstanding obligation in respect of U.S. debt under ERSA. The total outstanding amounts receivable from the Province in respect of U.S. debt under ERSA amounted to $182.3 million (1991 – $182.8 million). These amounts were due from the Province on the maturity dates of the associated debt issues. The present value of the amounts receivable was determined to be $98.1 million effective January 2, 1992 and was paid by the Province. The balance of $84.2 million has been deferred and is being amortized to finance expense on a sinking fund basis over the original lives of the associated debt.

NOTE 6 – DEFERRED RECEIVABLES AND ADVANCES

	1992	1991
	(millions of dollars)	
Amounts receivable from the Province under ERSA	$ 0.8	$ 184.4
Receivables under the CHEC Loan Program	10.3	–
Wiring contracts	5.2	6.4
Advance to Northern Flood Committee Inc.	–	4.3
Advance to the Split Lake Cree First Nation	–	2.5
Other deferred receivables	1.3	1.4
	$ 17.6	$ 199.0

The receivables under the CHEC (Cut Home Energy Costs) Loan Program represent amounts due from customers for loans extended by the Province of Manitoba to assist homeowners with upgrading the energy efficiency of their dwellings. The program has been discontinued for new loan applications and, at the request of the Province, the Corporation has purchased the outstanding receivables on the loans.

NOTE 7 – LONG-TERM DEBT

Manitoba Hydro's long-term debt is either advanced from or guaranteed by the Province of Manitoba.

As provided by The Manitoba Hydro Act, the Corporation pays an annual sinking fund installment to the Minister of Finance of the Province of Manitoba of not less than 1% of the principal amount of the outstanding long-term debt on the preceding March 31, and 4% of the balance in the sinking fund at such date. Such installments would provide for the full retirement of a debt obligation only if the obligation was outstanding for 41 years. Income earned on sinking fund investments is remitted to the Corporation and is included with investment income for the year.

For the purpose of financing capital construction expenditures and repaying debt during the year, the Corporation arranged long-term financing in the principal amount of $1 629.6 million (1991 – $768.8 million) as follows:

- $384.1 million Manitoba Hydro Savings Bonds Series 3 due June 15, 1996 with a coupon rate of 9.25% during the first year and a minimum coupon rate of 8% for the remaining four years. The bonds are subject to redemption semi-annually until maturity at the option of the bondholder.
- $586.1 million (U.S. $500.0 million) advance from the Province of Manitoba due February 1, 2002 with a coupon rate of 7.75%. This financing was issued under a debt restructuring arrangement whereby the Corporation exercised its options to call debt series 3E, 3H, 3L and 3M in the total amount of U.S. $450.0 million. The issues redeemed carried a weighted average coupon interest rate of 9.278%.
- $342.8 million (U.S. $300.0 million) advance from the Province of Manitoba due September 15, 2021 with a coupon rate of 8.875%.
- $299.9 million advance from the Province of Manitoba due March 5, 2031 with a coupon rate of 10.5%. This advance was the result of holders exercising debenture purchase warrants which expired March 5, 1992.
- $11.7 million advance from the Province of Manitoba under a loan agreement between the Province and Canada. The advance has a coupon rate of 9.5% and is due over a 30 year period commencing on March 31, 1993 through to March 31, 2023.
- $5.0 million Manitoba Hydro-Electric Board Bonds due April 30, 1997 with a coupon rate of 9.762%.

Long-Term Debt:

	1992	1991
	(millions of dollars)	
Total long-term debt outstanding –		
The Manitoba Hydro-Electric Board Bonds	$ 580.4	$ 1 173.3
Advances from the Province of Manitoba represented by debenture debt of the Province	4 128.0	3 124.4
Manitoba Hydro Savings Bonds	592.7	228.0
Advances from the Province of Manitoba under a loan agreement between the Province and Canada	139.7	130.6
	5 440.8	4 656.3
Less: Sinking fund on deposit with the Minister of Finance	468.5	457.0
	4 972.3	4 199.3
Less: Long-term debt maturing within one year– Maturities net of sinking fund plus annual sinking fund installment	880.1	314.6
	$ 4 092.2	$ 3 884.7

Debt Maturities:

Years	Principal Amount of Maturities	Weighted Average Coupon Rate	Cash Requirements (millions of dollars) Maturities Net of Sinking Fund	Annual Sinking Fund Installments	Total
1993	$ 912.7	9.83%	$ 809.1	$ 71.0	$ 880.1
1994	211.0	7.83%	160.8	60.5	221.3
1995	265.8	8.81%	199.7	59.0	258.7
1996	28.1	9.56%	21.1	56.3	77.4
1997	586.0	8.73%	539.4	58.1	597.5
	2 003.6	9.16%	1 730.1	304.9	2 035.0
1998-2002	1 950.7	8.30%	1 523.7	225.2	1 748.9
2003-2007	256.9	8.56%	131.9	128.7	260.6
2008-2012	24.1	9.32%	11.5	122.9	134.4
2013-2017	8.1	9.86%	4.8	147.6	152.4
2018-2031	1 197.4	9.85%	306.0	363.5	669.5
	$ 5 440.8	8.98%	$ 3 708.0	$ 1 292.8	$ 5 000.8

Currency In Which Payable:

	1992	1991
	(millions of Canadian dollars)	
Canadian dollars	$ 2 288.2	$ 1 841.5
United States dollars	3 148.7	2 806.8
Swiss francs	3.9	8.0
	$ 5 440.8	$ 4 656.3

Debt denominated in United States currency is not subject to foreign exchange fluctuations as book value rates have either been fixed by the exposure management program's offset strategy, or have been fixed according to monetary contracts.

United States debt in the amount of Canadian $3 148.7 million is recorded at the book value as established by the Corporation's exposure management program.

If United States debt recorded at book value rates as established by the exposure management program had been translated at the exchange rate prevailing at the balance sheet date ($1.00 United States = $1.1899 Canadian), the total obligation would have decreased by Canadian $0.1 million from Canadian $5 440.8 million to Canadian $5 440.7 million.

Swiss franc debt in the amount of Canadian $3.9 million has been fixed according to monetary contracts. A portion of the foreign exchange gains or losses on Swiss debt is the responsibility of the Province of Manitoba.

NOTE 8 – BANK BALANCES

Bank balances, or overdrafts, are covered by short-term bank lines of credit available to the Corporation up to an amount of $370 million.

NOTE 9 – DEFERRED LIABILITIES

	1992	1991
	(millions of dollars)	
Liabilities in respect of employee benefits:		
Vested sick leave	$ 13.6	$ 12.5
Banked vacation entitlement	6.7	5.5
Long-term disability	2.7	2.2
Severance benefits and other	1.7	1.6
	24.7	21.8
Mitigation liability (Note 13)	55.0	–
Amounts due to Split Lake Cree First Nation	21.2	–
Refundable advances from customers	8.6	8.2
Capital lease obligations	–	0.4
	$ 109.5	$ 30.4

NOTE 10 – PENSION OBLIGATIONS

Manitoba Hydro employees are eligible for pensions under the Manitoba Civil Service Superannuation Fund. This fund is a defined benefit plan which requires the Corporation to contribute 50% of the pension disbursements made to retired employees. On February 3, 1992 the Manitoba Hydro Retirement Plan, which provided benefits to pensioners in respect of service prior to the date each employee entered the Manitoba Civil Service Superannuation Fund, was wound up and consolidated with the Manitoba Civil Service Superannuation Fund.

During the year, the Corporation commenced funding of its pension obligations. A total of $100.8 million of contributions were made to the Manitoba Hydro Pension Fund in respect of the pension expense charged to operations, net of payments made to the Manitoba Civil Service Superannuation Board, to March 31, 1992.

Actuarial valuations are carried out every three years and provide an estimate of the accrued pension benefits. The most recent actuarial valuations for the Manitoba Civil Service Superannuation Fund and Manitoba Hydro Retirement Plan were performed as at December 31, 1989 and March 31, 1991 respectively. These valuations incorporate management's best estimate assumptions. The liability arising from the valuation is updated annually taking into account actual experience from the date of the last valuation.

Based on management's best estimate assumptions, the actuarial present value of the unfunded accrued pension benefits is estimated to be:

	1992	1991
	(millions of dollars)	
Present value of accrued benefits	$ 231.6	$ 219.5
Manitoba Hydro Pension Fund assets, at market	101.5	–
	$ 130.1	$ 219.5

Pension expense recorded in respect of employees under the Manitoba Civil Service Superannuation Fund for the year ended March 31, 1992 was $34.7 million based on the latest actuarial valuations (1991 – $32.9 million).

NOTE 11 – DEFERRED CREDITS

	1992	1991
	(millions of dollars)	
Non-refundable capital contributions	$ 104.5	$ 101.0
Unamortized discount on purchase of sinking fund investments	6.0	9.4
Deferred interest income	5.3	2.3
Other	0.9	0.4
	$ 116.7	$ 113.1

NOTE 12 – COMMITMENTS

Limestone Generating Station is proceeding into its final phase of construction. Out of a total of ten units, Limestone now has eight units in operation with the final two units scheduled to commence operation during the 1993 fiscal year. The cost of the new generating station is estimated to be $1 448.2 million, of which costs of $1 402.3 million have been incurred to March 31, 1992.

Other outstanding commitments, principally for construction, were approximately $156.1 million (1991 – $215.0 million).

NOTE 13 – MITIGATION

As a result of Manitoba Hydro's northern development projects, a number of communities experienced adverse impacts. The Corporation is committed to providing fair compensation to affected communities for the impacts of its development projects.

Manitoba Hydro is party to an agreement dated December 16, 1977 with Canada, the Province of Manitoba and the Northern Flood Committee Inc., representing five native bands in the communities of Cross Lake, Nelson House, Norway House, Split Lake and York Landing. This agreement, in part, provides for compensation and remedial measures necessary to ameliorate the impacts of the Churchill River Diversion and Lake Winnipeg Regulation projects.

Expenditures towards the mitigation of the impacts of the Churchill River Diversion and Lake Winnipeg Regulation projects amounted to $47.5 million for the year ended March 31, 1992 (1991 – $7.0 million). This includes a provision of $30.7 million in settlement of obligations to the Split Lake Cree First Nation as well as expenditures of $7.9 million towards construction of the Cross Lake Weir. In addition, mitigation payments totalling $11.4 million were made to Grand Rapids First Nation, The Pas Indian Band and the Community of Cormorant for the settlement of outstanding responsibilities related to the development of the Grand Rapids Generating Station.

In recognition of the anticipated mitigation settlements to be incurred, the Corporation has recorded a mitigation liability of $55.0 million. Reassessments of this liability will be made as settlements are achieved.

NOTE 14 – COMPARATIVE FIGURES

Where appropriate, comparative figures for 1991 have been reclassified in order to conform to the presentation adopted in 1992.

NOTE 15 – SUBSEQUENT EVENT

In June 1992, the Province of Manitoba and the Corporation agreed that, in consideration for Manitoba Hydro assuming obligations totalling approximately $43 million with respect to payments related to Hydro development projects, water power rental charges will be fixed at current rates until 1996. Of the $43 million, the Corporation has recorded approximately $26 million at March 31, 1992 related to actual and potential mitigation settlements. The balance of approximately $17 million pertains to electrical service enhancement projects in northern Manitoba and these expenditures will be recorded when incurred.

FINANCIAL STATISTICS
(millions of dollars)

	1992	1991	1990	1989	1988	1987	1986	1985	1984	1983
STATEMENT OF OPERATIONS										
Revenues										
Residential	260.7	254.6	241.3	223.9	205.4	186.2	176.8	162.4	140.5	122.0
General Service and Miscellaneous	337.4	322.9	305.5	291.6	259.3	227.7	223.2	205.2	180.3	155.9
Winnipeg Hydro (Cost-Sharing Agreement)	53.8	50.1	47.5	53.6	43.7	35.4	33.0	29.8	29.4	27.2
Extraprovincial	97.0	66.6	60.1	31.1	66.0	113.5	112.8	103.2	105.6	105.4
Construction Power	1.2	2.5	2.6	1.8	0	0	0	0	0	0
Other Revenue	6.6	7.8	7.1	7.5	5.9	6.9	6.8	5.8	5.7	4.2
	756.7	702.5	664.1	609.5	580.3	569.7	552.6	506.4	461.5	414.7
Expenses										
Operating and Administrative	237.5	253.9	248.3	229.7	203.7	157.9	173.9	157.8	149.0	138.5
Depreciation	114.5	93.0	87.6	82.6	80.1	77.7	74.5	69.3	66.3	61.7
Water Rentals	37.7	32.6	28.9	22.9	26.2	37.6	17.8	11.3	11.8	11.6
Fuel and Power Purchased	9.9	17.8	33.2	59.0	35.4	10.4	9.4	14.4	9.3	5.2
Finance Expense	339.4	256.6	241.9	241.7	253.4	242.6	246.7	242.5	228.8	213.8
	739.0	653.9	639.9	635.9	598.8	556.2	522.3	495.3	465.2	433.8
Net Income (Loss)	17.7	48.6	24.2	(26.4)	(18.5)	13.5	30.3	11.1	(3.7)	(19.1)
BALANCE SHEET										
Assets										
Fixed Assets in Service	5 602.0	4 521.9	3 748.3	3 619.8	3 496.5	3 395.8	3 314.4	3 173.2	3 030.2	2 945.4
Less Accumulated Depreciation	1 258.6	1 152.9	1 071.6	996.6	929.5	854.9	783.8	713.6	647.0	584.5
Construction in Progress	514.0	897.9	1 206.2	918.1	675.3	473.6	326.0	270.9	301.6	272.0
Current and Other Assets	1 077.3	939.2	811.6	844.4	589.7	225.5	272.7	193.1	249.3	251.6
	5 934.7	5 206.1	4 694.5	4 385.7	3 832.0	3 240.1	3 129.3	2 923.6	2 934.1	2 884.5
Liabilities and Reserves										
Long-Term Debt - net	4 092.2	3 884.7	3 556.6	3 341.1	3 213.0	2 652.1	2 523.8	2 213.1	2 404.7	2 367.6
Current and Other	1 659.7	1 156.3	1 021.3	952.2	500.2	450.7	481.6	616.9	451.1	434.9
Reserves	182.8	165.1	116.6	92.4	118.8	137.3	123.9	93.6	78.3	82.0
	5 934.7	5 206.1	4 694.5	4 385.7	3 832.0	3 240.1	3 129.3	2 923.6	2 934.1	2 884.5
STATEMENT OF CHANGES IN FINANCIAL POSITION										
Cash Provided From Operations										
Net Income (Loss)	17.7	48.6	24.2	(26.4)	(18.5)	13.5	30.3	11.1	(3.7)	(19.1)
Expenses not requiring Cash and Other	153.2	109.6	128.0	100.7	99.4	98.2	72.4	57.7	79.2	75.0
	170.9	158.2	152.2	74.3	80.9	111.7	102.7	68.8	75.5	55.9
Cash Provided From Financing										
Proceeds from Long-Term Debt - net	1 594.3	762.5	486.5	484.1	624.2	330.7	380.0	61.0	198.2	274.0
Retirement of Long-Term Debt - net	(798.5)	(396.9)	(282.4)	(179.3)	(107.7)	(92.8)	(170.7)	(84.1)	(175.5)	(75.4)
Sinking Fund Payment	(61.7)	(57.1)	(54.3)	(50.4)	(45.4)	(42.1)	(39.7)	(38.8)	(37.6)	(35.5)
Other	272.9	128.4	(88.8)	142.0	(25.5)	(91.0)	(19.5)	29.9	37.9	2.5
	1 007.0	434.9	61.0	396.4	445.6	104.8	150.1	(32.0)	23.0	165.6
Cash Used For Investment										
Additions to Fixed Assets	705.8	442.2	426.9	380.1	311.0	237.8	202.0	122.6	152.3	128.7
Contributions to Manitoba Hydro Pension Fund	100.8	0	0	0	0	0	0	0	0	0
Other Assets	12.3	3.3	15.4	12.3	6.1	(0.1)	0	0	(3.3)	(0.1)
	818.9	445.5	442.3	392.4	317.1	237.7	202.0	122.6	149.0	128.6
Increase (Decrease) in Cash	359.0	147.6	(229.1)	78.3	209.4	(21.2)	50.8	(85.8)	(50.5)	92.9

OPERATING STATISTICS

	1992	1991	1990	1989	1988	1987	1986	1985	1984	1983
INTEGRATED SYSTEM – MANITOBA HYDRO AND WINNIPEG HYDRO										
Installed Winter Capability (000 kW)	5 077	4 545	4 048	4 048	4 088	4 088	4 091	4 091	4 091	4 091
Manitoba Firm Peak Demand (000 kW)*	3 480	3 586	3 631	3 407	3 356	3 011	2 941	2 952	2 889	2 543
Percentage Change	-3.0	-1.2	+6.6	+1.5	+11.5	+2.4	-0.4	+2.2	+13.6	-7.0
Energy Supplied (000 000 kW.h)										
Manitoba Hydro Generation	22 911	19 881	18 044	15 327	19 148	22 957	22 226	20 261	20 967	20 539
Winnipeg Hydro Generation	1 036	973	1 062	774	702	1 028	1 085	1 066	1 042	1 159
Energy Imported										
Ontario	1	2	10	0	0	0	0	0	0	0
Saskatchewan	958	1 054	1 068	66	84	115	93	61	64	71
United States	54	706	1 295	2 264	1 050	0	17	20	7	43
Total System Supply	24 960	22 616	21 477	18 431	20 012	24 100	23 421	21 408	22 080	21 910
Firm Energy Supplied for Manitoba Integrated System (000 000 kW.h)*	17 748	17 553	17 298	17 108	16 280	15 495	15 366	14 993	14 387	13 280
Isolated Systems Generated and Purchased (000 000 kW.h)	23	21	21	19	20	46	46	47	48	47
Total Integrated & Isolated Systems (000 000 kW.h)*	17 771	17 574	17 319	17 127	16 280	15 541	15 412	15 040	14 435	13 307
Percentage Change	+1.1	+1.5	+1.1	+5.2	+4.7	+0.8	+2.3	+4.2	+8.5	-2.0
MANITOBA HYDRO SYSTEM										
Energy Sold (000 000 kW.h)										
Residential	4 807	4 682	4 673	4 295	4 416	4 527	4 535	4 355	4 054	3 730
General Service and Miscellaneous	8 160	8 060	7 941	7 857	7 479	7 133	6 893	6 755	6 414	5 962
Construction Power	39	95	93	96	0	0	0	0	0	0
Net Transfer to Winnipeg Hydro	1 510	1 571	1 503	1 726	1 629	1 273	1 190	1 154	1 143	930
Extraprovincial										
Ontario	1 609	1 721	1 796	428	1 004	917	917	795	1 153	852
Saskatchewan	174	14	20	114	104	10	222	233	289	231
United States	3 879	2 137	1 242	694	2 309	7 004	6 153	4 739	5 429	6 533
Number of Customers										
Residential	330 600	328 620	325 727	321 699	316 622	309 723	302 369	297 250	291 260	285 766
General Service and Miscellaneous	46 695	46 625	46 342	45 959	45 822	45 091	44 350	42 908	42 325	42 076
Peak Number of Employees	4 522	4 461	4 310	4 307	4 222	4 142	3 853	3 825	3 778	3 659

* Corrected by system losses applicable to extraprovincial sales.

GENERATING STATIONS AND CAPABILITIES

AS AT MARCH 31, 1992
(Normal Winter Capability)

INTERCONNECTED CAPABILITIES

	STATION	LOCATION	NO. OF UNITS	WINTER CAPABILITY IN KILOWATTS
HYDRAULIC:	Great Falls	Winnipeg River	6	132 000
	Seven Sisters	Winnipeg River	6	150 000
	Pine Falls	Winnipeg River	6	82 000
	McArthur	Winnipeg River	8	56 000
	Grand Rapids	Saskatchewan River	4	472 000
	Kelsey	Nelson River	7	224 000
	Kettle	Nelson River	12	1 272 000
	Jenpeg	Nelson River	6	126 000
	Long Spruce	Nelson River	10	980 000
	Limestone	Nelson River	8	1 064 000
	Laurie River (2)	Laurie River	3	10 000
	TOTAL HYDRAULIC			4 568 000
THERMAL:	Brandon		5	237 000
	Selkirk		2	132 000
	TOTAL THERMAL			369 000
	TOTAL			4 937 000

ISOLATED CAPABILITIES

DIESEL:	Brochet	1 175
	Garden Hill	4 165
	God's Lake Narrows	1 575
	God's River	525
	Lac Brochet	525
	Oxford House	1 775
	Pikwitonei	500
	Red Sucker Lake	950
	St. Theresa Point	2 685
	Shamattawa	975
	Tadoule Lake	700
	Thicket Portage	525
	Wasagamack	1 100
	TOTAL	17 175
TOTAL GENERATING CAPABILITY		4 954 175

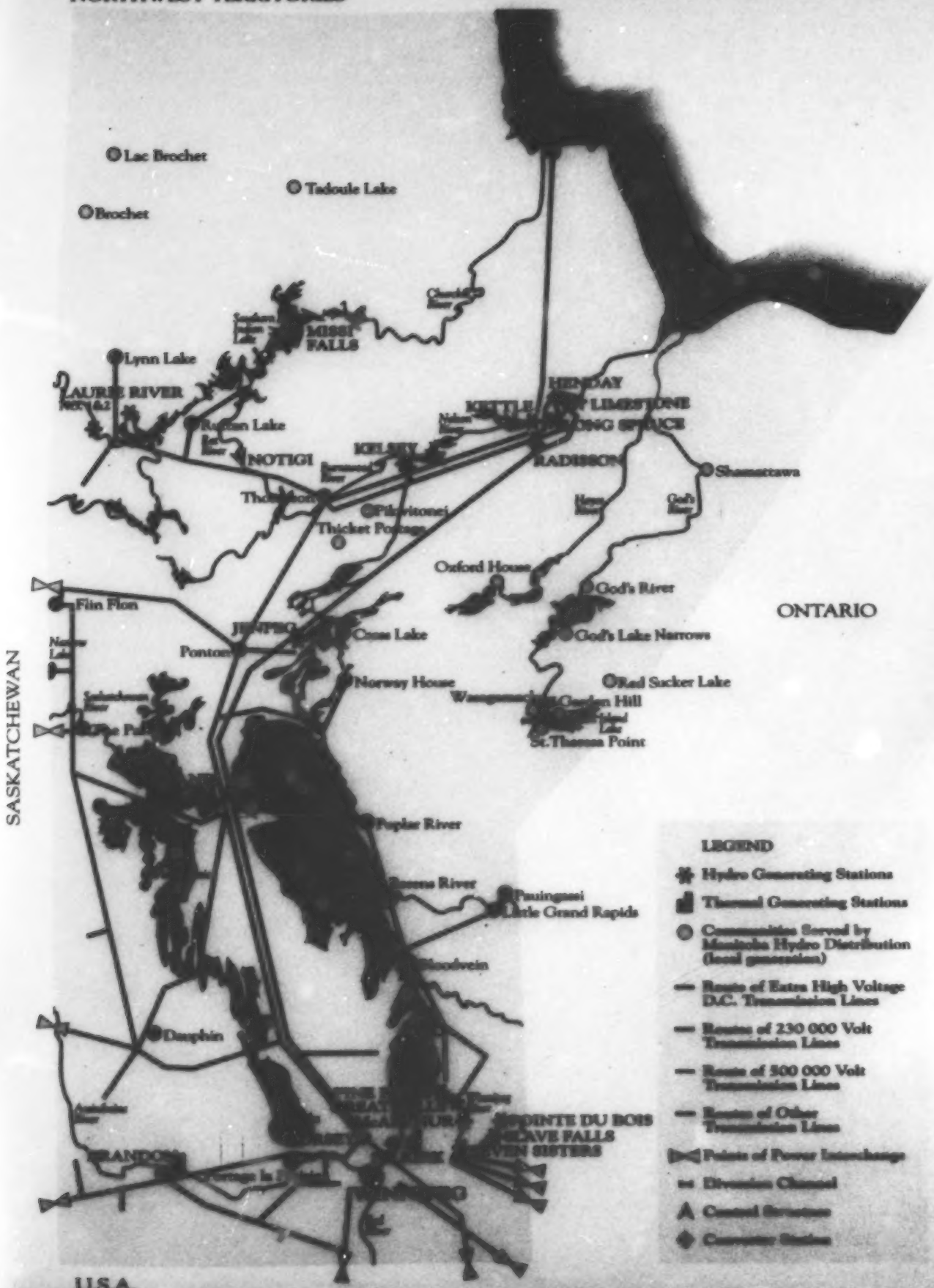
THE PROVINCE OF MANITOBA
POWER SOURCES AND
HIGH VOLTAGE TRANSMISSION
AS AT MARCH 31, 1992

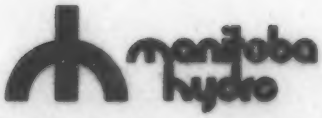
INTERCONNECTED CAPABILITIES

	STATION	LOCATION	NO. OF UNITS	WINTER CAPABILITY IN KILOWATTS
HYDRAULIC:	Great Falls	Winnipeg River	6	132 000
	Seven Sisters	Winnipeg River	6	150 000
	Pine Falls	Winnipeg River	6	82 000
	McArthur	Winnipeg River	8	56 000
	Grand Rapids	Saskatchewan River	4	472 000
	Kelsey	Nelson River	7	224 000
	Kettle	Nelson River	12	1 272 000
	Jenpeg	Nelson River	6	126 000
	Long Spruce	Nelson River	10	980 000
	Limestone	Nelson River	8	1 064 000
	Laurie River (2)	Laurie River	3	10 000
	TOTAL HYDRAULIC			4 568 000
THERMAL:	Brandon		5	237 000
	Selkirk		2	132 000
	TOTAL THERMAL			369 000
	TOTAL			4 937 000

ISOLATED CAPABILITIES

DIESEL:	Brochet	1 175
	Garden Hill	4 165
	God's Lake Narrows	1 575
	God's River	525
	Lac Brochet	525
	Oxford House	1 775
	Pikwitonei	500
	Red Sucker Lake	950
	St. Theresa Point	2 685
	Shamattawa	975
	Tadoule Lake	700
	Thicket Portage	525
	Wasagamack	1 100
	TOTAL	17 175
TOTAL GENERATING CAPABILITY		4 954 175


NORTHWEST TERRITORIES
Lac Brochet
Tadoule Lake
Brochet
Lynn Lake
LAURIE RIVER
Rat Rapids
Rat Lake
NOTIGI
Thompson
Pikwitonei
Thicket Portage
Oxford House
God's River
God's Lake Narrows
Red Sucker Lake
St. Theresa Point
Norway House
Cross Lake
Ponton
Flin Flon
ONTARIO
SASKATCHEWAN
Poplar River
Pauingassi
Little Grand Rapids
Dauphin
Pointe du Bois
Seven Sisters
Brandon
U.S.A.
LEGEND
Hydro Generating Stations
Thermal Generating Stations
Communities Served by Manitoba Hydro Distribution (local generation)
Routes of Extra High Voltage D.C. Transmission Lines
Routes of 230 000 Volt Transmission Lines
Routes of 500 000 Volt Transmission Lines
Routes of Other Transmission Lines
Points of Power Interchange
Diversion Channel
Control Structure
Converter Station


manitoba
hydro